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## NOAA Technical Memorandum NMFS



**JANUARY 1988**

### **ICHTHYOPLANKTON AND STATION DATA FOR CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS SURVEY CRUISES IN 1961**

Elaine M. Sandknop  
Richard L. Charter  
H. Geoffrey Moser  
Cynthia A. Meyer  
Amy E. Hays

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## CONTENTS

	Page
List of Figures .....	iii
List of Tables .....	iv
Abstract .....	1
Introduction .....	1
Sampling Area and Pattern .....	2
Sampling Gear and Methods .....	3
Laboratory Procedures .....	4
Identification .....	5
Computer Entry and Editing .....	10
Species Summary .....	11
Explanation of Tables .....	11
Acknowledgments .....	12
Literature Cited .....	13
Figures .....	16
Tables .....	23
Index .....	163

# LIST OF FIGURES

	Page
Figure 1. Composite arrangement of diagrammatic charts showing areas sampled on each CalCOFI cruise during 1961 .....	16
Figure 2. Station pattern for CalCOFI Cruise 6101 showing tracks for the <i>Horizon</i> and <i>Hugh M. Smith</i> .....	17
Figure 3. Station pattern for CalCOFI Cruise 6101 showing track for the <i>Black Douglas</i> .....	18
Figure 4. Station pattern for CalCOFI Cruise 6104 .....	19
Figure 5. Station pattern for CalCOFI Cruise 6107 .....	20
Figure 6. Station pattern for CalCOFI Cruise 6110 .....	21
Figure 7. The basic station plan for CalCOFI cruises from 1950 to the present .....	22

# LIST OF TABLES

	Page
Table 1. Station and plankton tow data for cruises in 1961 .....	23
Table 2. Pooled occurrences of fish larvae taken during CalCOFI cruises in 1961 .....	47
Table 3. Pooled numbers of fish larvae taken during CalCOFI cruises in 1961 .....	50
Table 4. Numbers of fish larvae taken on stations occupied during CalCOFI cruises in 1961 .....	53
Table 5. Summary of pooled occurrences of fish larvae taken on CalCOFI cruises from 1961-1969 .....	158
Table 6. List of stations with multiple occu- pancies in any month during 1961 .....	162





## ABSTRACT

This report provides ichthyoplankton and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) cruises conducted off California and Baja California in 1961. It is the eleventh report in a series that presents these data for all biological-oceanographic CalCOFI surveys from 1951 to the present. A total of 953 stations was occupied during 4 quarterly multivessel cruises over a survey area which extended from Pt. Reyes, California to Cape San Lazaro, Mexico and seaward to several hundred miles. The data are listed in a series of 6 tables; the background, methodology, and information necessary for interpretation and quantitative analysis of the data are presented in an accompanying text. All pertinent station and tow data, including volumes of water strained and standard haul factors, are listed in the first table. Another key table lists, by station and month, standardized counts of each of the 141 larval fish categories identified from survey samples. This and previous and subsequent reports make the CalCOFI ichthyoplankton and station data available to all investigators and serve as guides to the newly developed computer data base.

## INTRODUCTION

This report, the eleventh of a series, provides ichthyoplankton and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) joint biological-oceanographic survey cruises conducted in 1961. This program was initiated in 1949, under the sponsorship of the Marine Research Committee of the State of California, to study the population fluctuations of the Pacific sardine (*Sardinops sagax*) and the environmental factors that may play a role in such fluctuations. CalCOFI, known as the California Cooperative Sardine Research Program from 1949 to 1953, was made up of representatives of the South Pacific Fisheries Investigations (SPFI) of the U.S. Fish and Wildlife Service [now the La Jolla Laboratory, National Marine Fisheries Service (NMFS)], the Scripps Institution of Oceanography (SIO), the California Department of Fish and Game (CDFG), the California Academy of Sciences (CAS) and the Hopkins Marine Station of Stanford University. The first three of these agencies supplied ships and personnel to conduct the sea surveys. NMFS processed the plankton samples and analyzed the ichthyoplankton from them. SIO processed and analyzed the hydrographic samples and measurements and also analyzed invertebrate groups from the plankton samples.

The boundaries, station placement, and sampling frequency for the CalCOFI survey area were based on the results of joint biological and oceanographic cruises conducted by NMFS and SIO during 1939-41. Those cruises were designed to collect sardine eggs and larvae and associated hydrographic data over the entire areal and seasonal spawning range of the species. On these survey cruises, plankton tows were made to 70 m, a depth which

encompassed the vertical distribution of sardine eggs and larvae. Wide-ranging joint biological and oceanographic survey cruises were resumed in 1949 with sardine as the focus; however, an increasing interest in other biological components resulted in the deepening of standard tows to 140 m in 1951. This marked the beginning of truly quantitative ichthyoplankton sampling on CalCOFI surveys.

Data resulting from CalCOFI surveys in 1961 have been published in a number of forms. Hydrographic data (Univ. of Calif., SIO, 1961, 1962) and zooplankton volumes (Smith, 1971) were presented in standard formats. Distributional maps of larvae of 5 taxa taken on CalCOFI surveys during 1961 are presented in the CalCOFI Atlas series: northern anchovy (*Engraulis mordax*), Kramer and Ahlstrom, 1968; jack mackerel (*Trachurus symmetricus*) and Pacific hake (*Merluccius productus*), Ahlstrom, 1969; Pacific sardine (*Sardinops sagax*), Kramer, 1970; rockfish (*Sebastes* spp.), Ahlstrom et al., 1978. Distribution and abundance data for northern anchovy and Pacific sardine larvae from 1951 to 1964 were summarized by Ahlstrom (1966).

A computer data base for eggs and larvae of sardine and anchovy, for larvae of hake, jack mackerel and Pacific mackerel (*Scomber japonicus*), and for eggs of Pacific saury (*Cololabis saira*) was established in 1969. The development of a data base for other fish larvae is a complex undertaking because competency of identification has evolved steadily over the past 38 years. We began the task of producing a CalCOFI ichthyoplankton data base and associated data report series in 1983. All available original records for 1961 were subjected to an extensive verification and editing process to produce this report. This with previous (Ambrose et al., 1987a, b, c; Sandknop et al., 1987a, b; Stevens et al., 1987a, b, c; Sumida et al., 1987a, b) and subsequent reports make the CalCOFI ichthyoplankton and station data available to all investigators and serve as guides to the computer data base. The data base will be modified when additional errors are discovered and when composite taxa from the earlier years are reidentified. These reports are the fundamental reference documents against which subsequent changes in the data base can be compared.

## SAMPLING AREA AND PATTERN

Beginning in 1961, CalCOFI survey cruises were made at quarterly intervals. A total of 953 stations included in this data base was occupied on 4 quarterly cruises, with an average of 238 stations per cruise (range 229-243). Coverage of the survey station pattern varied among cruises and the entire survey area was not covered on any single cruise (Figures 1-6, Table 1). The pattern covered on most cruises was from line 60 to 140 with each cruise extending over 2 months. In the hydrographic data reports for 1961 (Univ. of Calif., SIO, 1961, 1962) both months are used to designate each cruise (6101-02, 6104-05, 6107-08, 6110-11);

however, only the first month of occupancy is used to identify cruises in the ichthyoplankton data base and reports.

Stations off northern California (lines 40-57) were not occupied in 1961. The area off central California (lines 60-77) was surveyed on all cruises. The area between Pt. Conception, California and Pt. San Juanico, Baja California (lines 80-137) was surveyed on all cruises and on Cruise 6110 coverage extended south to line 140. Offshore coverage was more extensive than during previous monthly surveys with station lines extending seaward to station 200 on lines 60, 70, 80, and 90 on all cruises, a distance of approximately 600-700 miles offshore<sup>1</sup>. Typically, coverage on other lines extended to station 90 (ca. 160-260 miles offshore) or station 120 (ca. 270-360 miles offshore).

Three vessels were employed on these cruises: the *Black Douglas* and *Hugh M. Smith* of NMFS and the *Horizon* of SIO. The *Black Douglas* and *Horizon* were used on all cruises, and the *Hugh M. Smith* was used on one cruise (Univ. of Calif., SIO, 1961, 1962).

#### SAMPLING GEAR AND METHODS

The standard CalCOFI net used from 1949 to 1969 had a 1-m diameter mouth opening ( $0.785 \text{ m}^2$  area) and an overall length of about 5 m. The net was constructed of 30xxx gauze, a heavy duty grade of silk bolting cloth, with a mesh size of 0.55 mm after shrinkage. The last 40 cm of the cone and the cod end were constructed of 56xxx grit gauze which had a mesh size of 0.25 mm after shrinkage. The net ring was fastened to a short 3-lead bridle connected to several meters of line which attached to the towing cable by a clamp. A current meter was suspended in the center of the net mouth to measure volume of water filtered (see Kramer et al., 1972, for further details).

The standard tow from 1951 through 1968 was an oblique haul to 140 m depth (to 15 m of the bottom in shallow areas) designed

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<sup>1</sup>CalCOFI lines (Figure 7) are arranged perpendicular to the coastline and extend from the Canadian border (line 10) to below Cape San Lucas, Baja California (line 157). Stations were established on the basis of a perpendicular to line 80 (off Pt. Conception) at a point designated as station 60. Stations were plotted seaward and shoreward from station 60 on each line. Cardinal CalCOFI lines (those ending in "0") are 120 miles apart and usually bracket two ordinal lines (ending in "3" or "7"), so that lines are 40 miles apart over most of the pattern. Cardinal stations are 40 miles apart and typically these are separated by a station number ending in "5" so that stations are 20 miles apart out to station 90 on most lines. Stations are placed at closer intervals near the coast and islands to accommodate these features (see Kramer et al., 1972 for further details).

to filter a constant amount of water per depth interval (ca.  $3\text{m}^3/\text{m}$  of depth) over the vertical range of most ichthyoplankters. Hauls were made at a ship speed of 1.5-2.0 knots and initiated by clamping the net line to the towing cable with the 45 kg terminal weight about 10-15 m below the surface. The net was lowered to 140 m depth by paying out 200 m of wire over a 4 minute period (35 m of depth/min.). After fishing at depth for 30 seconds, the net was retrieved at 20 m/min. (14 m depth/min.). The angle of stray of the towing cable was recorded every 30 seconds and maintained at  $45^\circ (\pm 3^\circ)$  by adjusting the ship speed and course. After reaching the surface, the net was washed down and the samples preserved in 5% formalin buffered with sodium borate. Flowmeter readings were made at the beginning and end of each tow. Detailed descriptions of gear and methods are given by Ahlstrom (1953), Kramer et al. (1972), and Smith and Richardson (1977).

### LABORATORY PROCEDURE

Laboratory processing began with the determination of a displacement volume for each sample (methods described in Staff, SPFI, 1953 and Kramer et al., 1972). Zooplankton volumes (including ichthyoplankton) of samples collected in 1961 are presented graphically in Smith (1971).

Sorting involved the removal of ichthyoplankton from the sample and identification and separation of: eggs and larvae of Pacific sardine and northern anchovy; larvae of Pacific hake; and eggs of Pacific saury. Usually, each sample was sorted completely; however, some of the samples were fractionated into aliquots using a Folsom plankton splitter (McEwen et al., 1954) prior to sorting. Several criteria<sup>2</sup> were used to determine whether a sample was fractionated: typically, samples containing an abundance of thaliacians and coelenterates and exceeding 150 ml in total plankton volume were fractionated (to 50% or 12.5%) to approximate a reduced volume of 50 ml for sorting; samples with an excessive quantity of fish eggs and/or larvae were occasionally fractionated to expedite the sorting process in order to meet scheduled deadlines. If the identified fraction of an aliquot yielded rare or interesting species of fish larvae, the remaining fraction was frequently sorted and identified with the intent of finding additional specimens. Aliquot percentages for fractionated samples from 1961 are listed in Table 1 under the "Percent Sorted" column; 1.3% of the samples collected in 1961 were fractionated.

A "standard haul factor" (SHF) was calculated for each tow to make them comparable and allow estimations of areal abundance. This factor adjusts the number of eggs or larvae in a haul to the

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<sup>2</sup>Personal communication, James R. Thrailkill, National Marine Fisheries Service, Southwest Fisheries Center, La Jolla, CA.

number in  $10 \text{ m}^3$  of water strained per meter of depth fished. If the vertical distribution of the species has been encompassed, then the adjusted value is equivalent to the number under  $10 \text{ m}^2$  of sea surface. The SHF is calculated for each haul by the formula:

$$\text{SHF} = \frac{10 \text{ D}}{\text{V}}$$

where D = depth of haul = cosine of the average angle of stray of the towing cable multiplied by cable length (m)

V = total volume of water ( $\text{m}^3$ ) strained during the haul

$$\text{V} = \text{R} \cdot \text{a} \cdot \text{p}$$

where R = total number of revolutions of the current meter during the haul

a = area ( $\text{m}^2$ ) of the mouth of the net

p = length of column of water (m) needed to produce one revolution of the current meter.

Tow depth, volume of water strained, and standard haul factor are listed in Table 1 for each tow taken during 1961. Detailed descriptions of factors involved in calculating these values are presented in Ahlstrom (1948), Kramer et al. (1972), and Smith and Richardson (1977).

## IDENTIFICATION

Identification of ichthyoplankton species beyond those separated during the sorting process was carried out by a separate group of specialists. Ontogenetic stages of fishes are inherently difficult to identify and this is further complicated by the large number and diversity of species which contribute to the ichthyoplankton of the California Current region. Most identifications were accomplished by establishing ontogenetic series on the basis of morphology, meristics, and pigmentation and then identifying these series by relating them to known metamorphic, juvenile, or adult stages with overlapping features (Powles and Markle, 1984). A total of 139 taxa was identified for 1961, with 84 taken to species, 29 to genus, 20 to family, and 6 to order or suborder. Beginning in 1961, larvae in the families Paralepididae and Labridae were identified to genus or species.

The task of producing a reliable and equitable ichthyoplankton data base required extensive procedures to verify, correct, and edit the original identifications. The

primary data source was the original identification sheets (see Kramer et al., 1972, for examples); however, a critical resource used in all phases of this process was the CalCOFI ichthyoplankton collection in which the samples are archived. Throughout the course of CalCOFI ichthyoplankton studies, samples have been identified to the lowest taxon possible. In reviewing these identifications for the data base, our approach has been conservative and we have preserved those identifications and counts which we could confirm, while correcting as many of the errors as possible. After computer entry, taxonomic errors and inconsistencies in the data base were corrected and the most obvious identification errors were corrected. Our current knowledge of ichthyoplankton techniques coupled with a precise understanding of the development of identification competency in the program over the years allowed us to critically judge the historical records. Identifications were changed to different taxa, lumped to a higher taxonomic category, or given a more precise taxonomic name. In some cases, identifications of a taxon were inconsistent among cruises in a year. These records were made equitable by lumping to the higher taxonomic category to avoid biases that could result in quantitative misinterpretations.

Next, statistical, seasonal, and geographic outliers were identified, employing a series of graphic summaries and listings. Examination of geographic outliers proved to be especially effective because of our accumulated knowledge of species distributions. In the course of examining samples for these outliers, other identification errors were discovered and eventually all taxa were scrutinized to some extent. Lastly, certain taxa were reexamined in all samples for the entire CalCOFI time series. These taxa were selected because of their commercial, ecological, phylogenetic, or zoogeographic importance or because taxonomic confusion was at the ordinal level. The following is a list of the taxa for 1961 which received special attention, with explanations and caveats intended to aid in quantitative interpretations:

*Anguilliformes* - tentative and sporadic identifications to family or lower taxon lumped to order.

*Sardinops sagax* - all specimens south of line 120 checked for misidentification of *Opisthonema* spp.

*Engraulis mordax* - some nearshore samples of small *E. mordax* may contain other anchovy genera which could not be differentiated.

*Nansenia* spp. - all specimens checked and identified as *N. candida* or *N. crassa*; all specimens of these species near their range boundaries checked.

*Bathylagus* spp. - includes small and/or disintegrated specimens of *Bathylagus* or *Leuroglossus stilbius*.



Stomiiformes - all specimens identified to genus or species; residuals are small, poorly preserved or unavailable specimens.

*Vinciguerrria lucetia* - specimens taken seaward of station 100 checked for misidentification of *V. poweriae*; some *V. poweriae* may remain in *V. lucetia* samples from these stations because small larvae of the two species could not be differentiated; sporadic identification of *V. poweriae* began in 1961.

Sternoptychidae - tentative and sporadic identifications of hatchetfishes to genus were lumped to family.

*Bathophilus* spp. - all specimens checked.

*Eustomias* spp. - specimen checked.

*Photonectes* spp. - all specimens checked.

*Tactostoma macropus* - all specimens checked.

Paralepididae - all specimens examined and identified to species.

Scopelarchidae - tentative and sporadic identifications to genus lumped to family.

*Lampanyctus* spp. - tentative and sporadic identifications to species lumped to genus.

*Lampanyctus regalis* - underrepresented because of inability to differentiate small larvae (<5 mm) from those of other species of the genus; counts may include other species of the genus because of difficulty in identifying larvae of this large and complex genus.

*Lampanyctus ritteri* - comment for *L. regalis* applies to this species.

*Stenobranchius leucopsarus* - all specimens south of line 120 checked.

*Triphoturus mexicanus* - all specimens seaward of station 100 checked for misidentification of *T. nigrescens*.

*Triphoturus nigrescens* - all specimens checked.

*Diogenichthys atlanticus* - all specimens at margins of range checked.

*Diogenichthys laternatus* - all specimens at margins of range checked.

- Electrona rissoi* - recognition of this species was inconsistent and others may be included in *Protomyctophum crockeri* or Myctophidae.
- Hygophum* spp. - all specimens reidentified to species; residuals are small, poorly preserved or unavailable specimens.
- Hygophum atratum* - all specimens checked.
- Hygophum reinhardtii* - all specimens checked.
- Protomyctophum crockeri* - some samples on northern lines may contain *P. thompsoni*, which was not identified originally.
- Ophidiiformes - this category did not exist originally and ophidiiform larvae were included in "*Otophidium*", "Zoarcidae", and "blenny"; "Zoarcidae" is a yet unidentified ophidiiform species; all "*Otophidium*" and "blenny" were reexamined and the former included *Ophidion scrippsae*, *Chilara taylori* and other ophidiiform taxa (moved to order); "blenny" contained *O. scrippsae*, *C. taylori*, and other ophidiiform taxa in addition to true blennioids.
- Trachipteridae - tentative and sporadic identifications to genus were lumped to family.
- Melamphaes* spp. - all identifications ascribed to Melamphaidae were reexamined and assigned to genus (*Melamphaes*, *Poromitra*) or species (*Scopelogadus bispinosus*, *Scopeloberyx robustus*); larvae originally identified as *Melamphaes* spp. were not reexamined and this category may contain other melamphaid genera.
- Cottidae - all specimens checked.
- Oxylebius pictus* - all specimens checked.
- Zaniolepis* spp. - all specimens checked.
- Sebastes* spp. - category may contain other scorpaenid genera, particularly in samples south of line 120.
- Blennioidei - this is the residual of the completely reexamined "blenny" category, which also contained various misidentified ophidiiforms, and is now restricted to members of northern stichaeioid families and true blennioids (other than *Hypsoblennius* spp.) in the southern part of the pattern).
- Labridae - all specimens originally identified to family were reexamined and assigned to genus (*Halichoeres* spp.) or species (*Oxyjulis californica*, *Semicossyphus pulcher*).
- Chromis punctipinnis* - all specimens south of line 120 checked.



*Howella brodiei* - all specimens checked; originally identified as Apogonidae; in this report we list *H. brodiei* in the family Apogonidae for convenience, recognizing that its systematic affinities are not resolved.

*Seriola lalandi* - all specimens checked.

*Girella nigricans* - all specimens checked.

*Medialuna californiensis* - all specimens checked.

*Caulolatilus princeps* - all specimens checked.

Sciaenidae - tentative and sporadic identifications to genus lumped to family.

Scombridae - all larvae identified to this family or constituent taxa (except *Scomber japonicus*) were reexamined and reassigned; residuals are small, poorly preserved or unavailable specimens.

*Peprilus simillimus* - this category may be underrepresented and additional specimens may be in Sciaenidae or the unidentified category.

Pleuronectiformes - all specimens of this category (originally called "flatfish") were examined and reidentified; residuals are small, poorly preserved or unavailable specimens.

*Citharichthys* spp. - all larvae identified to species were lumped to genus except *C. stigmaeus*; category includes larvae of *Etropus* spp.

*Citharichthys stigmaeus* - includes larvae larger than ca. 4.5 mm; smaller larvae are in *Citharichthys* spp.

*Paralichthys* spp. - all specimens of this genus were examined and most were assigned to *P. californicus* or *Xystreurys liolepis*.

*Xystreurys liolepis* - originally misidentified as *Paralichthys californicus*; all specimens reidentified.

*Glyptocephalus zachirus* - all specimens examined.

*Hypsopsetta guttulata* - specimens were originally identified as *Pleuronichthys* spp.

*Lepidopsetta bilineata* - specimen checked; originally identified as *Psettichthys melanostictus*.

*Microstomus pacificus* - all specimens examined.

*Pleuronichthys* spp. - all larvae of this genus and constituent species were examined and assigned to species; residuals are small, poorly preserved or unavailable specimens.

*Psettichthys melanostictus* - all specimens examined.

#### COMPUTER ENTRY AND EDITING

Each taxon on the original identification sheets was given a 3-digit code based on the list of codes in Haight et al. (1979). Taxon codes and counts from these sheets were keypunched by cruise and station, along with pertinent station and tow data and entered into the VAX 11/780 computer at the University of California, San Diego, Computing Center. After entries were completed for an entire year, print-out listings of taxa and counts on each station were compared with the original data sheets to eliminate keypunch errors. Next, data in the file were cross-checked with data on an existing file which contained: station and tow data; numbers of eggs of sardine, anchovy, and saury; numbers of larvae of sardine, anchovy, hake, jack mackerel, and Pacific mackerel; total number of fish eggs; and total number of fish larvae.

Discrepancies in ichthyoplankton data in these two files were corrected by inspecting original records from the sorting laboratory, the original ichthyoplankton identification sheets, and the samples themselves. Station and tow data discrepancies between the two files were corrected by reviewing ships' logs and deck tow sheets, original records from the sorting laboratory, cruise announcements, publications, header information on the ichthyoplankton identification sheets, and station plots generated for each cruise. Eventually all station and tow data were checked by comparing these sources.

The corrected ichthyoplankton data base was then examined statistically and outliers were found and checked as above. Distributional plots were then prepared for each taxon and these were checked by reviewing the data sources mentioned above and by examining archived specimens. A listing of each taxon by station (Table 4) was produced, which became the primary document for subsequent checks. Misidentifications found in geographic outlier checks and other misidentifications and data problems discovered in the course of examining archived samples resulted in several iterations of Table 4. Finally, totals in Table 4 were checked against annual summaries of incidence and abundance (Tables 2 and 3). Ecological analyses of the data were conducted concurrently with editing procedures and provided cross-checks that allowed correction of errors.

## SPECIES SUMMARY

Larvae of northern anchovy (*Engraulis mordax*) represented 50.9% of all fish larvae taken on CalCOFI cruises during 1961 and numbered five times as many as the gonostomatid *Vinciguerria lucetia*, the next most abundant species with 10.3% of the total larvae (Tables 2, 3). These species ranked 1st and 3rd, respectively, in numbers of occurrences. The third most abundant species, the myctophid *Triphoturus mexicanus*, constituted 5.7% of all larvae and ranked 2nd in occurrence. Larvae of *Sebastes* spp., a composite of about 70 species, ranked 4th in abundance (4.8%) and occurrence. The deepsea smelt *Leuroglossus stilbius* ranked 5th in abundance and 7th in occurrence. Larvae of Pacific hake (*Merluccius productus*) ranked 6th in abundance but only 14th in occurrence. The lanternfish *Stenobranchius leucopsarus* ranked 7th in abundance and 10th in occurrence. The sanddab genus *Citharichthys* spp. ranked 8th in abundance and occurrence. Jack mackerel (*Trachurus symmetricus*) and the lanternfish *Ceratoscopelus townsendi* ranked 9th and 10th in abundance and 19th and 16th in occurrence. The 10 top-ranking taxa contributed 86.9% of all larvae taken during 1961. The remaining 13.1% was represented by 139 taxa and the unidentified and disintegrated categories. Of the 10 top-ranking taxa 5 were midwater species, 3 were coastal demersal species or generic groupings, and 2 were coastal pelagic species.

## EXPLANATION OF TABLES

Table 1 - This table lists by cruise the pertinent station and tow data for 1961, the volume of water filtered and standard haul factor for each tow, the percent of sample sorted, and the total numbers of fish eggs and larvae. CalCOFI cruises are designated by four digits; the first two indicate the year and the second two the month. Within each cruise the data are listed in order of increasing line and station number (southerly and seaward directions); the order of station occupancy is shown on the station charts (Figures 2-6). Stations are designated by two groups of digits; the first set indicates the line and decimal fraction and the second set indicates the station on the line. Time is listed as Pacific Standard Time at the start of each tow in 24-hour designation. Methods for determining tow depth, volume of water strained, standard haul factor, and percent sorted were described in the methods section. The values for total fish eggs and larvae represent raw counts (unadjusted for percent sorted or standard haul factor). Ship codes are as follows: BD, Black Douglas; HS, Hugh M. Smith; HO, Horizon.

Table 2 - This table lists pooled occurrences of all larval fish taxa taken during 1961 in ranked order.

- Table 3 - This table lists pooled counts of all larval fish taxa taken during 1961 in ranked order. Numbers are adjusted for percent sorted and standard haul factors.
- Table 4 - This table gives numbers of fish larvae for each taxon, listed by station and calendar month in which the tow was taken. Counts are adjusted for percent of sample sorted and standard haul factor. Average values are given for stations occupied more than once during a month. See Table 1 for station and tow data and Table 6 for listing of stations with multiple occupancies during a month. Multiple occupancies occurred when a station was occupied more than once during a calendar month. The orders are listed in "phylogenetic" sequence modified from Nelson (1984). Subtaxa within each order are listed alphabetically. Page numbers for each taxon are given in the index at the end of the report.
- Table 5 - This table is a summary of pooled occurrences of all larval fish taxa taken on CalCOFI surveys from 1961 to 1969. Taxa are listed in the same order as in Table 4.
- Table 6 - List of stations with multiple occupancies in one month during 1961.

#### ACKNOWLEDGMENTS

The senior author originally identified larvae from CalCOFI cruises of 1961. Ronald Whyte coded each larval fish taxon or type and Rita Ford entered them into the computer. Debby Snow efficiently assisted in all aspects of data editing and retrieval. Larry Zins and James Ryan provided programming assistance. Dorothy Roll designed the CalCOFI data acquisition system and provided data processing support. Ken Raymond, Roy Allen, and Henry Orr helped with graphics and production of the report. Lorraine Prescott and Diane Forsythe prepared the manuscript for printing. Paul Smith determined statistical outliers, provided assistance during geographical outlier checks and offered helpful suggestions throughout the project. Izadore Barrett, Director of the Southwest Fisheries Center and Reuben Lasker, Chief, Coastal Fisheries Resources Division, SWFC, provided the support critical to the completion of the project. James Thrailkill planned CalCOFI surveys and supervised cruises, data handling, and plankton sorting from 1949 to 1986 and is largely responsible for the high quality of these operations. Without the vision and direction of Elbert Ahlstrom and Elton Sette and the dedicated efforts of the many people who collected, processed, and analyzed the samples, this data base would not exist.

## LITERATURE CITED

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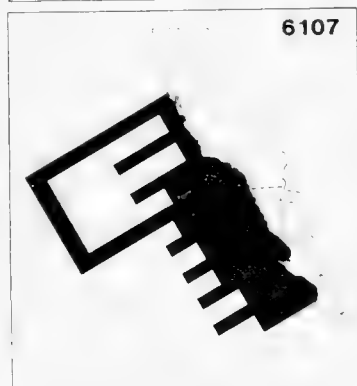


Figure 1. Composite arrangement of diagrammatic charts showing areas sampled on each CalCOFI cruise during 1961.



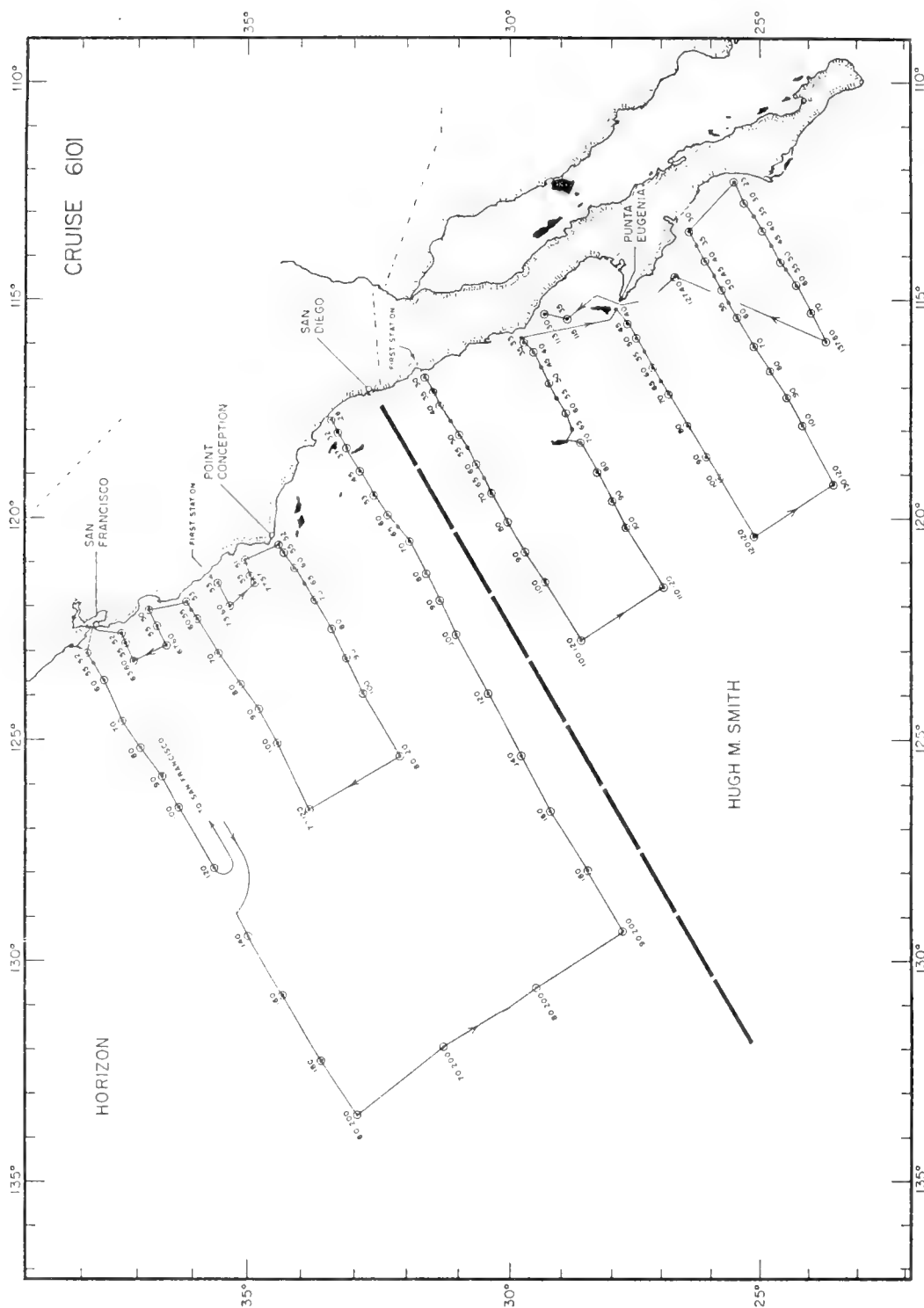
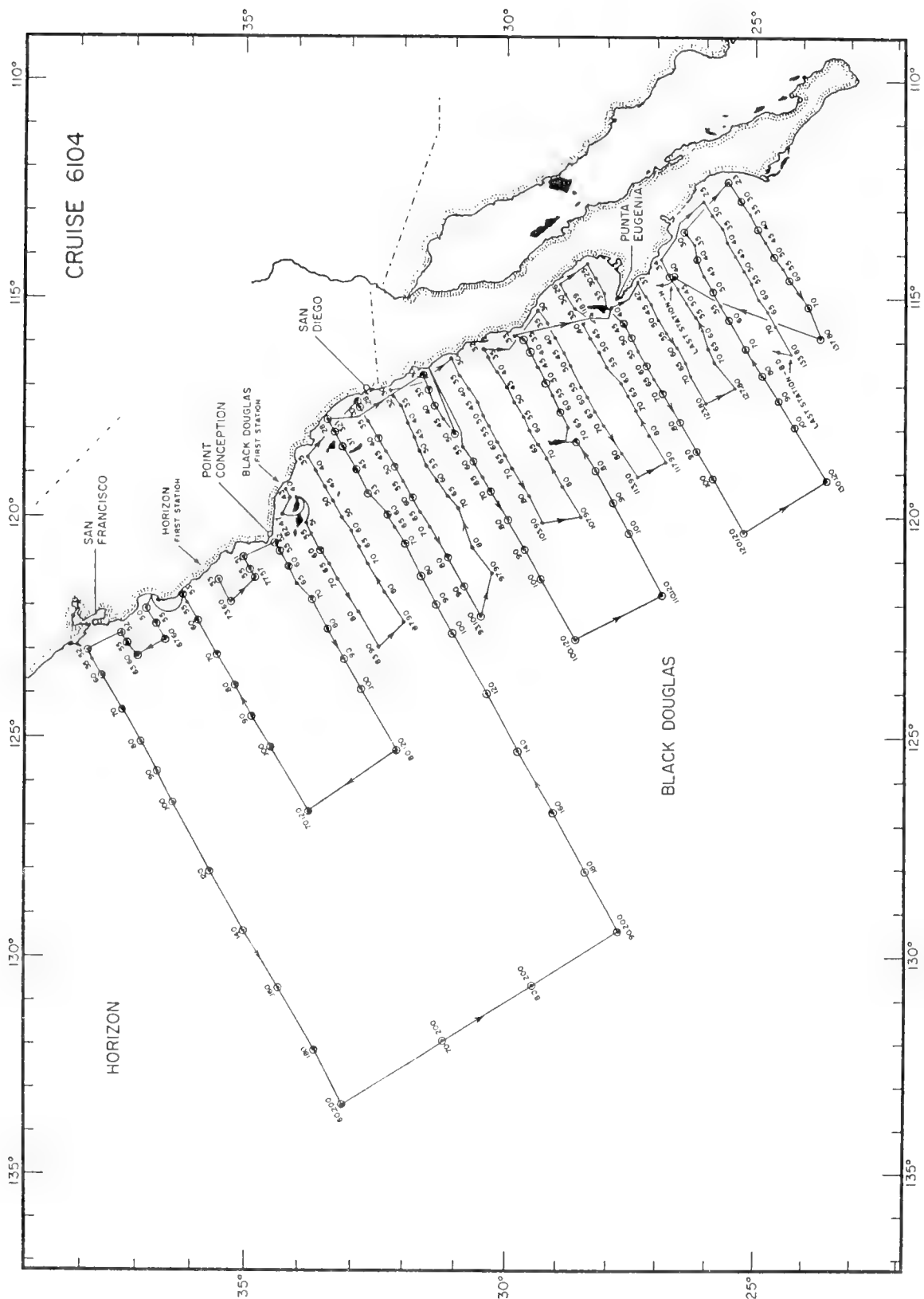
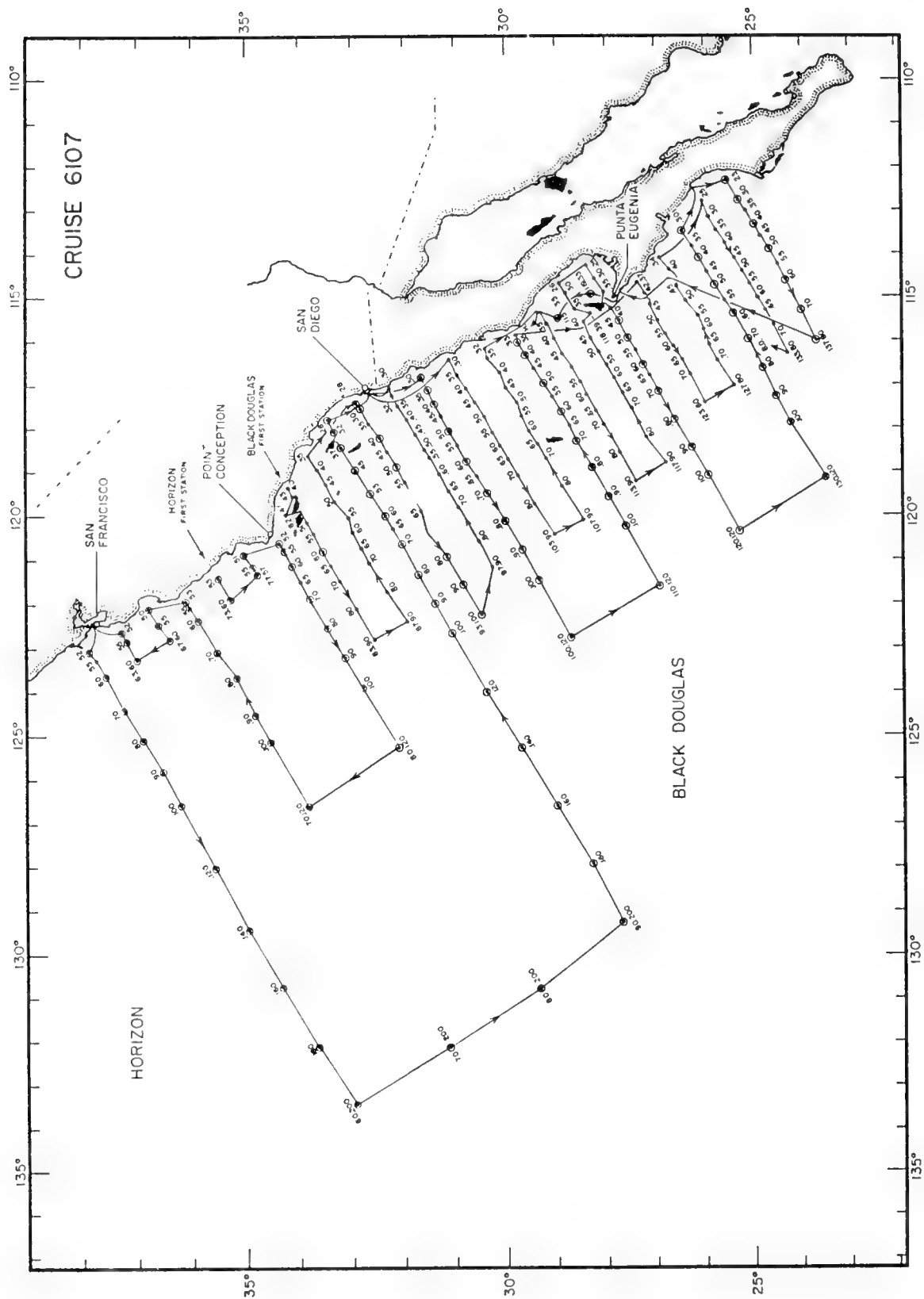


Figure 2. Station pattern for CalCOFI Cruise 6101 showing tracks for the *Horizon* and the *Hugh M. Smith*. Stations with plankton tows are indicated by a dot; circles indicate hydrographic stations. Figures 2-6 modified from charts in Univ. of Calif., SIO (1961, 1962) to include only those stations listed in Table 1 of this report.







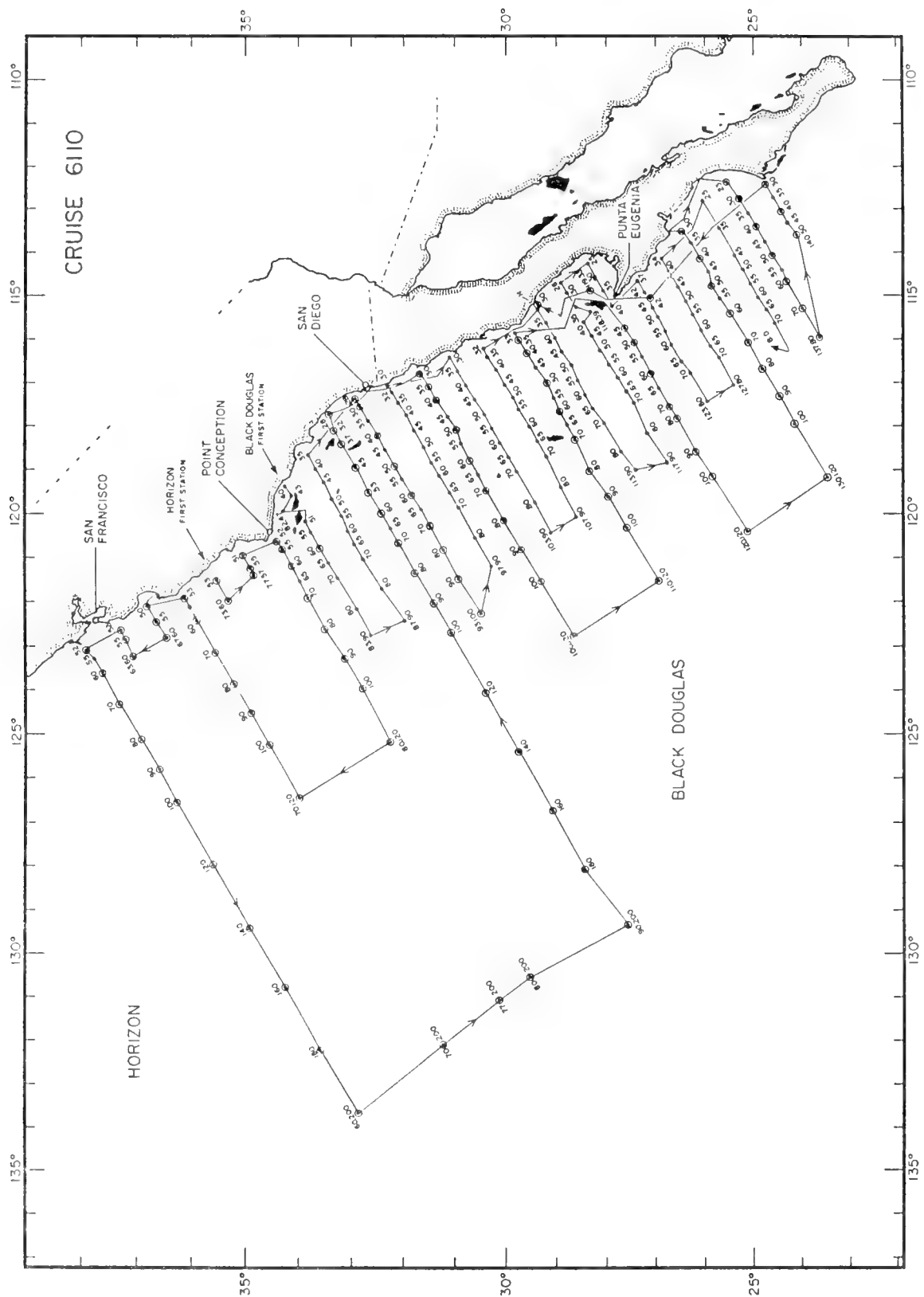


Figure 6. Station pattern for CalCOFI Cruise 6110. Symbols as in Figure 2.

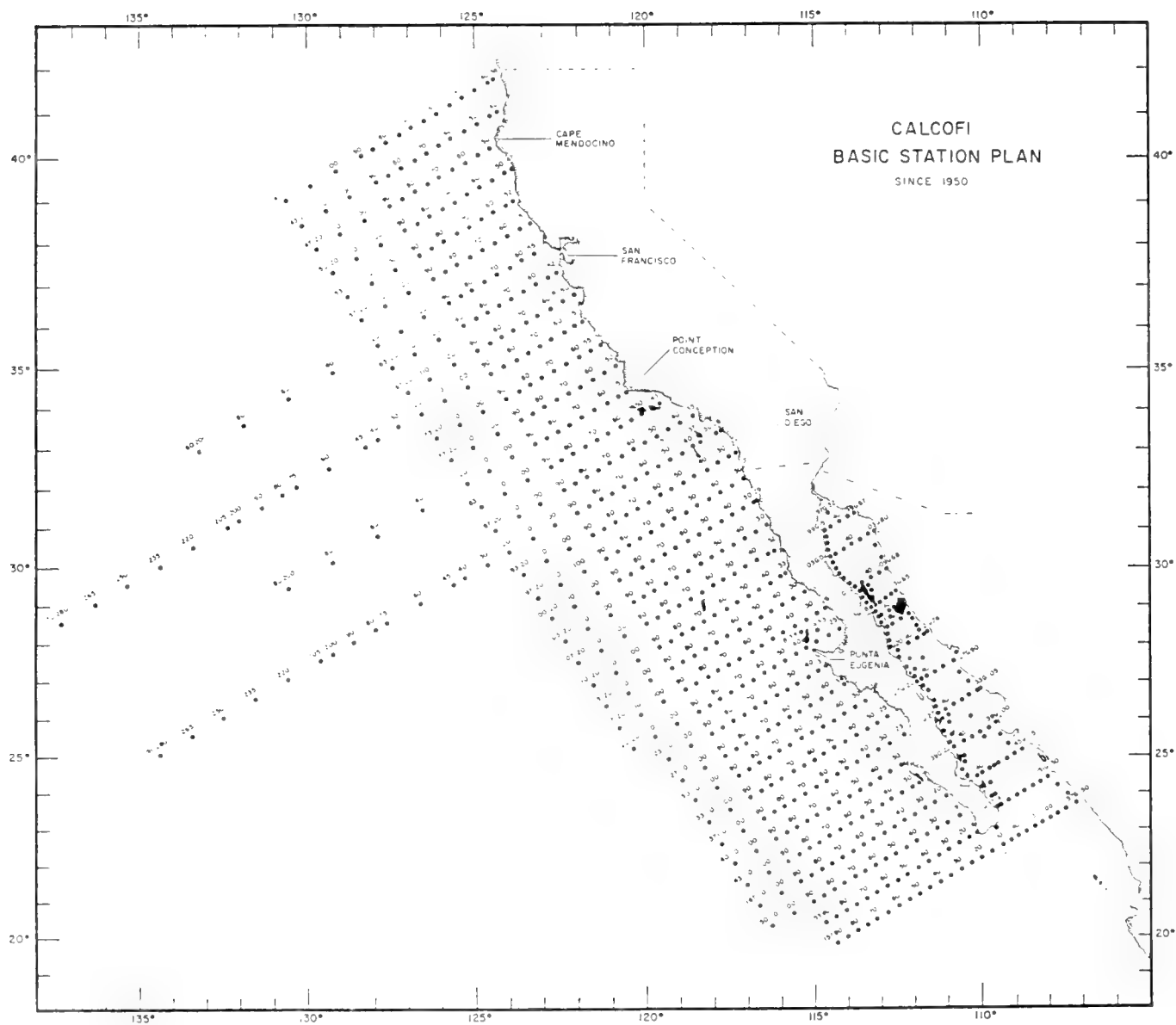


Figure 7. The basic station plan for CalCOFI cruises from 1950 to the present.

TABLE 1. Station and plankton tow data for CalCOFI cruises in 1961. Counts for fish eggs and larvae are not adjusted for standard haul factor or percent of sample sorted.

CalCOFI Cruise 6101

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	52.0	37 53.7	123 01.8	HO	61 01 11	1603	62	245	2.52	100.0	22	521
60.0	55.0	37 47.5	123 15.0	HO	61 01 11	1732	108	347	3.12	100.0	72	156
60.0	60.0	37 36.8	123 38.8	HO	61 01 11	2041	122	509	2.40	100.0	49	55
60.0	70.0	37 17.5	124 23.3	HO	61 01 12	0206	126	546	2.30	100.0	24	45
60.0	80.0	36 59.0	125 11.0	HO	61 01 12	0711	127	562	2.27	100.0	14	38
60.0	90.0	36 35.0	125 47.0	HO	61 01 12	1641	110	575	1.91	100.0	25	35
60.0	100.0	36 15.5	126 30.0	HO	61 01 12	2036	131	528	2.48	100.0	7	6
60.0	120.0	35 35.5	127 51.0	HO	61 01 13	0631	112	594	1.88	100.0	8	11
60.0	140.0	34 59.0	129 23.8	HO	61 01 17	0151	132	546	2.42	100.0	0	1
60.0	160.0	34 19.5	130 43.3	HO	61 01 17	0956	152	490	3.09	100.0	0	9
60.0	180.0	33 36.0	132 12.8	HO	61 01 17	1941	134	517	2.60	100.0	14	10
60.0	200.0	32 56.0	133 27.0	HO	61 01 18	0256	143	508	2.82	100.0	22	22
63.0	52.0	37 18.5	122 36.9	HO	61 01 11	0428	52	295	1.79	100.0	212	611
63.0	55.0	37 14.1	122 50.5	HO	61 01 11	0226	130	539	2.41	100.0	159	23
63.0	60.0	37 04.0	123 12.2	HO	61 01 10	2331	141	504	2.80	100.0	118	65
67.0	50.0	36 48.8	122 04.5	HO	61 01 10	1213	68	276	2.48	100.0	54	30
67.0	55.0	36 39.0	122 28.2	HO	61 01 10	1526	125	557	2.24	100.0	638	10
67.0	60.0	36 29.5	122 52.0	HO	61 01 10	1836	146	482	3.02	100.0	52	5
70.0	53.0	36 07.0	121 53.8	HO	61 01 10	0641	130	530	2.45	100.0	58	3
70.0	55.0	36 02.1	122 05.0	HO	61 01 10	0351	128	564	2.26	100.0	24	24
70.0	60.0	35 54.3	122 19.2	HO	61 01 10	0151	153	452	3.39	100.0	35	24
70.0	70.0	35 32.6	123 01.5	HO	61 01 09	2036	152	448	3.39	100.0	3	3
70.0	80.0	35 07.5	123 44.0	HO	61 01 09	1521	125	550	2.27	100.0	17	31
70.0	90.0	34 46.5	124 18.9	HO	61 01 09	0946	134	529	2.52	100.0	15	32
70.0	100.0	34 27.0	125 04.5	HO	61 01 09	0346	130	514	2.53	100.0	5	7
70.0	120.0	33 51.1	126 30.9	HO	61 01 08	1846	92	644	1.43	100.0	23	15
73.0	200.0	31 16.5	131 55.2	HO	61 01 18	1646	143	486	2.94	100.0	7	10
73.0	53.0	35 31.4	121 28.7	HO	61 01 05	2211	146	543	2.68	100.0	19	3
73.0	60.0	35 19.0	121 59.5	HO	61 01 06	0206	149	519	2.88	100.0	13	11
77.0	51.0	35 01.7	120 56.5	HO	61 01 06	1351	152	454	3.36	100.0	22	10
77.0	55.0	34 55.8	121 17.3	HO	61 01 06	0946	107	667	1.60	100.0	61	17
77.0	57.0	34 51.1	121 27.3	HO	61 01 06	0711	129	586	2.19	100.0	24	8
80.0	52.0	34 24.5	120 36.0	BD	61 02 02	1601	138	540	2.37	100.0	195	18
80.0	52.0	34 24.0	120 35.8	HO	61 01 06	1831	126	531	2.56	100.0	4	16
80.0	55.0	34 18.7	120 48.4	BD	61 02 02	1801	144	491	2.93	100.0	33	31
80.0	55.0	34 18.7	120 48.2	HO	61 01 06	2101	134	513	2.61	100.0	211	68
80.0	60.0	34 07.8	121 08.6	HO	61 01 07	0011	98	635	1.54	100.0	34	136
80.0	60.0	34 09.0	121 09.2	BD	61 02 02	2116	143	506	2.83	100.0	6	84
80.0	65.0	33 59.0	121 30.0	BD	61 02 03	0100	130	516	2.52	100.0	33	28
80.0	65.0	33 56.0	121 30.5	HO	61 01 07	0241	94	449	2.10	100.0	25	16
80.0	70.0	33 49.0	121 51.0	BD	61 02 03	0446	128	549	2.34	100.0	5	5
80.0	70.0	33 44.2	121 52.0	HO	61 01 07	0556	113	544	2.07	100.0	7	13
80.0	80.0	33 31.0	122 31.0	BD	61 02 03	1021	132	545	2.41	100.0	2	2

TABLE 1. (cont.)

## CalCOFI Cruise 6101

Line	Station	Lat.-(N) deg. min.	Long.-(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
80.0	80.0	33 25.0	122 30.5	HO	61 01 07	1121	134	492	2.71	100.0	8	4
80.0	90.0	33 09.2	123 08.0	HO	61 01 07	1616	134	496	2.70	100.0	3	7
80.0	100.0	32 49.4	123 55.1	HO	61 01 07	2106	113	582	1.94	100.0	29	7
80.0	120.0	32 08.1	125 20.9	HO	61 01 08	0535	126	534	2.35	100.0	0	3
80.0	200.0	29 30.0	130 33.0	HO	61 01 19	0621	133	543	2.46	100.0	53	30
82.0	47.0	34 15.0	119 58.0	BD	61 02 04	1436	8	463	2.86	100.0	79	111
83.0	40.0	34 14.0	119 22.0	BD	61 02 04	1851	123	103	0.81	100.0	33	417
83.0	43.0	34 08.0	119 34.0	BD	61 02 04	1700	132	482	2.54	100.0	38	54
83.0	51.0	33 52.0	120 07.5	BD	61 02 04	1052	83	335	2.48	100.0	101	189
83.0	55.0	33 44.0	120 24.5	BD	61 02 04	0831	123	593	2.07	100.0	67	626
83.0	60.0	33 38.5	120 49.5	BD	61 02 04	0506	137	527	2.60	100.0	68	190
83.0	65.0	33 27.3	121 09.0	BD	61 02 04	0001	116	712	1.63	100.0	11	64
83.0	70.0	33 16.0	121 28.0	BD	61 02 03	2101	133	483	2.75	100.0	22	18
83.0	80.0	32 56.0	122 05.0	BD	61 02 03	1556	142	508	2.80	100.0	4	8
87.0	35.0	33 50.0	118 37.5	BD	61 02 04	2341	139	436	3.18	100.0	23	660
87.0	40.0	33 39.5	118 58.0	BD	61 02 05	0221	139	542	2.57	100.0	27	324
87.0	45.0	33 30.0	119 19.0	BD	61 02 05	0501	134	505	2.65	100.0	33	285
87.0	50.0	33 20.0	119 39.5	BD	61 02 05	0701	66	262	2.52	100.0	142	234
87.0	55.0	33 10.0	120 00.5	BD	61 02 05	0941	135	491	2.75	100.0	50	165
87.0	60.0	33 00.0	120 21.5	BD	61 02 05	1215	138	472	2.93	100.0	726	864
87.0	65.0	32 50.0	120 45.0	BD	61 02 05	1450	139	471	2.96	100.0	18	114
87.0	70.0	32 40.0	121 05.0	BD	61 02 05	1725	136	503	2.71	100.0	53	18
87.0	80.0	32 19.5	121 43.0	BD	61 02 05	2141	142	491	2.89	100.0	18	11
90.0	28.0	33 27.2	117 45.7	HO	61 01 23	1156	107	603	1.78	100.0	77	498
90.0	32.0	33 20.5	118 03.1	HO	61 01 23	0941	135	500	2.69	100.0	15	1235
90.0	37.0	33 10.5	118 23.7	HO	61 01 23	0636	118	567	2.09	100.0	28	876
90.0	45.0	32 54.3	118 55.7	HO	61 01 23	0226	123	558	2.21	100.0	10	308
90.0	53.0	32 38.7	119 28.8	HO	61 01 22	1756	119	528	2.26	100.0	13	9
90.0	60.0	32 21.5	119 56.0	HO	61 01 22	1421	112	581	1.93	100.0	1	4
90.0	65.0	32 10.0	120 12.8	HO	61 01 22	1056	144	477	3.01	100.0	2	9
90.0	70.0	31 56.7	120 31.4	HO	61 01 22	0846	143	450	3.18	100.0	2	4
90.0	80.0	31 38.0	121 15.0	HO	61 01 22	0356	131	544	2.41	100.0	8	34
90.0	90.0	31 22.0	121 53.0	HO	61 01 21	2321	144	481	3.00	100.0	10	15
90.0	100.0	31 03.2	122 38.1	HO	61 01 21	1841	127	547	2.33	100.0	3	2
90.0	120.0	30 25.3	123 56.5	HO	61 01 21	0556	130	523	2.48	100.0	7	1
90.0	140.0	29 47.0	125 19.4	HO	61 01 20	2026	139	517	2.68	100.0	20	13
90.0	160.0	29 12.9	126 34.3	HO	61 01 20	1221	128	576	2.22	100.0	1	5
90.0	180.0	28 29.5	127 56.5	HO	61 01 20	0351	132	560	2.35	100.0	24	5
90.0	200.0	27 47.0	129 17.8	HO	61 01 19	1916	120	584	2.06	100.0	19	6
93.0	28.0	32 54.7	117 21.8	BD	61 02 08	0546	136	499	2.72	100.0	80	125
93.0	30.0	32 50.5	117 31.5	BD	61 02 08	0345	136	494	2.75	100.0	33	104
93.0	35.0	32 40.5	117 51.5	BD	61 02 08	0101	134	516	2.61	100.0	184	526
93.0	40.0	32 30.0	118 12.5	BD	61 02 07	2146	138	502	2.75	100.0	58	934
93.0	45.0	32 20.0	118 32.0	BD	61 02 07	1801	139	498	2.80	100.0	4	118
93.0	50.0	32 10.0	118 52.5	BD	61 02 07	1445	139	486	2.86	100.0	1	17



TABLE 1. (cont.)

## CalCOFI Cruise 6101

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
93.0	55.0	32 02.5	119 14.0	BD	61 02 07	1121	138	503	2.75	100.0	4	20
93.0	60.0	31 55.0	119 37.0	BD	61 02 07	0806	142	482	2.94	100.0	1	3
93.0	65.0	31 44.5	119 57.0	BD	61 02 07	0600	142	484	2.93	100.0	2	0
93.0	70.0	31 33.0	120 16.5	BD	61 02 07	0215	142	468	3.04	100.0	12	1
93.0	80.0	31 11.5	120 55.5	BD	61 02 06	2020	138	475	2.91	100.0	4	11
93.0	90.0	30 50.0	121 31.0	BD	61 02 06	1505	141	471	2.99	100.0	1	24
93.0	100.0	30 26.0	122 14.0	BD	61 02 06	0930	139	508	2.74	100.0	7	23
97.0	30.0	32 16.0	117 07.0	BD	61 02 09	1710	45	211	2.12	100.0	49	160
97.0	32.0	32 12.0	117 15.2	BD	61 02 09	1811	134	526	2.55	100.0	83	1007
97.0	35.0	32 05.5	117 27.5	BD	61 02 09	1941	138	486	2.84	100.0	28	295
97.0	40.0	31 56.0	117 48.0	BD	61 02 09	2211	138	496	2.79	100.0	19	75
97.0	45.0	31 46.0	118 08.5	BD	61 02 10	0051	138	523	2.64	100.0	15	45
97.0	50.0	31 36.0	118 29.0	BD	61 02 10	0315	138	494	2.80	100.0	23	121
97.0	60.0	31 15.5	119 10.0	BD	61 02 10	0831	141	472	2.98	100.0	9	91
97.0	65.0	31 05.0	119 30.5	BD	61 02 10	1056	138	442	3.12	100.0	13	443
97.0	70.0	30 57.0	119 48.0	BD	61 02 10	1336	141	481	2.93	100.0	1	69
97.0	80.0	30 35.0	120 31.0	BD	61 02 10	1815	131	523	2.50	100.0	10	47
100.0	30.0	31 40.6	116 46.5	HS	61 01 27	1841	143	500	2.87	100.0	37	52
100.0	35.0	31 30.8	117 06.8	HS	61 01 27	2256	138	508	2.72	100.0	7	16
100.0	40.0	31 21.5	117 27.1	HS	61 01 28	0426	136	443	3.06	100.0	5	13
100.0	45.0	31 11.4	117 47.9	HS	61 01 28	1116	138	501	2.75	100.0	30	1
100.0	50.0	31 00.0	118 08.3	HS	61 01 28	1621	141	482	2.91	100.0	35	16
100.0	55.0	30 50.0	118 27.1	HS	61 01 28	1846	142	603	2.35	100.0	11	4
100.0	60.0	30 40.3	118 47.1	HS	61 01 28	2216	139	492	2.82	100.0	1	3
100.0	65.0	30 31.0	119 06.9	HS	61 01 29	0041	127	547	2.32	100.0	8	1
100.0	70.0	30 21.5	119 26.0	HS	61 01 29	0401	144	570	3.06	100.0	2	1
100.0	80.0	30 03.1	120 06.0	HS	61 01 29	0916	134	504	2.66	100.0	1	1
100.0	90.0	29 42.5	120 46.0	HS	61 01 29	1626	134	531	2.53	100.0	5	74
100.0	100.0	29 19.9	121 26.2	HS	61 01 29	2211	134	522	2.57	100.0	8	56
100.0	120.0	28 36.7	122 44.6	HS	61 01 30	0756	140	512	2.74	100.0	25	358
103.0	30.0	31 06.0	116 24.5	BD	61 02 12	0545	34	254	1.33	100.0	33	109
103.0	35.0	30 56.0	116 45.0	BD	61 02 12	0156	123	528	2.34	100.0	61	576
103.0	40.0	30 46.0	117 04.5	BD	61 02 11	2300	142	450	3.15	100.0	8	34
103.0	45.0	30 36.0	117 24.0	BD	61 02 11	2026	142	459	3.10	100.0	41	40
103.0	50.0	30 26.0	117 44.5	BD	61 02 11	1740	142	488	2.90	100.0	0	14
103.0	55.0	30 16.0	118 05.0	BD	61 02 11	1455	140	485	2.89	100.0	1	14
103.0	60.0	30 06.0	118 25.0	BD	61 02 11	1231	139	491	2.83	100.0	4	11
103.0	65.0	29 56.5	118 44.0	BD	61 02 11	1001	139	478	2.90	100.0	7	21
103.0	70.0	29 46.5	119 04.0	BD	61 02 11	0721	134	502	2.68	100.0	26	104
103.0	80.0	29 26.5	119 44.0	BD	61 02 11	0236	136	495	2.75	100.0	11	55
107.0	32.0	30 25.8	116 11.0	BD	61 02 12	0926	134	488	2.75	100.0	188	6480
107.0	35.0	30 21.5	116 22.5	BD	61 02 12	1101	135	459	2.95	100.0	126	1796
107.0	40.0	30 11.0	116 42.0	BD	61 02 12	1340	141	461	3.05	100.0	13	352
107.0	45.0	30 01.5	117 02.0	BD	61 02 12	1626	134	468	2.86	100.0	0	36
107.0	55.0	29 39.0	117 41.0	BD	61 02 12	2221	139	482	2.87	100.0	10	27

TABLE 1. (cont.)

## CalCOFI Cruise 6101

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
107.0	60.0	29 28.0	117 58.0	BD	61 02 13	0025	140	487	2.88	100.0	8	38
107.0	65.0	29 20.0	118 20.0	BD	61 02 13	0306	142	492	2.89	100.0	11	17
107.0	70.0	29 11.0	118 41.0	BD	61 02 13	0540	141	476	2.96	100.0	15	56
107.0	80.0	28 51.5	119 20.5	BD	61 02 13	1006	140	496	2.82	100.0	8	11
110.0	33.0	29 49.0	115 51.8	HS	61 02 02	1313	66	273	2.41	100.0	494	752
110.0	35.0	29 43.6	115 58.8	HS	61 02 02	1056	136	508	2.67	100.0	255	1540
110.0	40.0	29 34.6	116 11.4	HS	61 02 02	0756	136	500	2.72	100.0	4	53
110.0	45.0	29 24.7	116 33.2	HS	61 02 02	0401	125	562	2.23	100.0	352	97
110.0	50.0	29 15.1	116 55.2	HS	61 02 02	0121	139	322	2.89	100.0	21	12
110.0	55.0	29 05.5	117 16.4	HS	61 02 01	2056	139	566	2.45	100.0	6	2
110.0	60.0	28 55.1	117 38.0	HS	61 02 01	1746	147	463	3.17	100.0	3	2
110.0	65.0	28 47.0	118 00.0	HS	61 02 01	1001	140	487	2.86	100.0	0	7
110.0	70.0	28 37.4	118 18.1	HS	61 02 01	0441	151	416	3.64	100.0	1	2
110.0	80.0	28 18.6	118 57.2	HS	61 01 31	2231	143	491	2.90	100.0	8	48
110.0	90.0	28 00.0	119 35.9	HS	61 01 31	1701	145	492	2.95	100.0	7	24
110.0	100.0	27 42.7	120 12.0	HS	61 01 31	1111	139	510	2.72	100.0	14	11
110.0	120.0	26 58.1	121 34.5	HS	61 01 31	0106	129	492	2.62	100.0	53	78
113.0	30.0	29 22.0	115 18.0	BD	61 02 14	2224	43	164	2.62	100.0	28	170
113.0	35.0	29 11.5	115 38.0	BD	61 02 14	1940	139	476	2.92	100.0	57	75
113.0	40.0	29 02.0	115 57.0	BD	61 02 14	1700	154	476	3.23	100.0	38	821
113.0	45.0	28 52.0	116 18.0	BD	61 02 14	1415	142	490	2.90	100.0	22	429
113.0	50.0	28 44.0	116 39.0	BD	61 02 14	1107	144	480	3.00	100.0	3	12
113.0	55.0	28 41.0	116 56.0	BD	61 02 14	0916	139	502	2.78	100.0	15	784
113.0	60.0	28 27.0	117 23.0	BD	61 02 14	0526	138	505	2.72	100.0	22	26
113.0	65.0	28 15.0	117 41.0	BD	61 02 14	0246	141	496	2.89	100.0	4	27
113.0	70.0	28 05.0	117 58.0	BD	61 02 14	2346	144	514	2.90	100.0	6	44
113.0	80.0	28 27.0	117 41.0	BD	61 02 13	1850	131	479	2.55	100.0	1	37
115.0	35.0	28 54.1	115 26.2	HS	61 02 12	0936	143	479	2.99	100.0	146	1793
117.0	26.0	28 56.0	114 41.5	BD	61 02 15	0303	64	239	2.68	100.0	0	54
117.0	30.0	28 48.0	114 56.5	BD	61 02 15	0500	94	378	2.49	100.0	1186	1784
117.0	35.0	28 38.0	115 16.0	BD	61 02 15	2101	142	442	3.21	100.0	158	386
117.0	40.0	28 28.0	115 35.5	BD	61 02 15	2346	141	482	2.92	100.0	298	123
117.0	45.0	28 18.0	115 56.0	BD	61 02 16	1401	146	475	3.18	100.0	25	231
117.0	50.0	28 08.0	116 15.0	BD	61 02 16	1630	139	455	3.05	100.0	0	6
117.0	55.0	27 58.0	116 34.5	BD	61 02 16	1905	142	461	3.08	100.0	1	12
117.0	60.0	27 48.0	116 53.0	BD	61 02 16	2141	140	468	3.00	100.0	18	62
117.0	65.0	27 37.5	117 13.5	BD	61 02 17	0016	147	454	3.24	100.0	29	73
117.0	70.0	27 28.0	117 32.5	BD	61 02 17	0251	142	487	2.92	100.0	31	38
117.0	80.0	27 08.0	118 10.5	BD	61 02 17	0741	134	492	2.72	100.0	13	93
118.0	39.0	28 18.5	115 23.7	BD	61 02 16	0141	142	460	3.09	100.0	209	35
119.0	33.0	28 19.0	114 53.0	BD	61 02 15	1720	104	368	2.83	100.0	29	525
120.0	25.0	28 22.5	114 15.0	BD	61 02 15	1028	49	227	2.16	100.0	75	589
120.0	30.0	28 13.0	114 34.0	BD	61 02 15	1230	85	308	2.75	100.0	54	910
120.0	35.0	28 03.0	114 54.0	BD	61 02 15	1516	77	273	2.81	100.0	45	700
120.0	40.0	27 56.2	115 14.0	HS	61 02 03	0319	22	89	2.51	100.0	75	178

TABLE 1. (cont.)

## CalCOFI Cruise 6101

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
120.0	45.0	27 42.5	115 33.5	HS	61 02 03	0710	143	491	2.90	100.0	11	28
120.0	50.0	27 32.7	115 53.0	HS	61 02 03	1110	140	482	2.91	100.0	2	23
120.0	55.0	27 22.5	116 12.1	HS	61 02 03	1356	140	500	2.80	100.0	14	14
120.0	60.0	27 12.3	116 31.6	HS	61 02 03	1725	147	464	3.16	100.0	13	55
120.0	65.0	27 02.7	116 51.4	HS	61 02 03	2021	141	495	2.84	100.0	30	45
120.0	70.0	26 51.8	117 10.7	HS	61 02 04	0000	137	491	2.79	100.0	37	65
120.0	80.0	26 30.0	117 52.0	HS	61 02 04	0556	141	468	3.01	100.0	31	27
120.0	90.0	26 06.8	118 36.3	HS	61 02 04	1326	133	512	2.60	100.0	33	18
120.0	100.0	25 49.9	119 03.7	HS	61 02 04	1801	141	468	3.02	100.0	43	0
120.0	120.0	25 07.5	120 23.9	HS	61 02 05	0416	142	485	2.93	100.0	46	139
123.0	37.0	27 24.0	114 40.0	BD	61 02 18	1230	64	232	2.76	100.0	840	202
123.0	42.0	27 14.0	114 59.0	BD	61 02 18	0505	139	474	2.92	100.0	616	1126
123.0	45.0	27 08.0	115 11.5	BD	61 02 18	0331	143	475	3.01	100.0	24	179
123.0	50.0	26 58.0	115 31.0	BD	61 02 18	0046	143	466	3.06	100.0	6	93
123.0	55.0	26 48.0	115 49.5	BD	61 02 17	2206	137	482	2.85	100.0	19	96
123.0	60.0	26 38.5	116 09.0	BD	61 02 17	1916	142	488	2.90	100.0	12	30
127.0	34.0	26 55.0	114 06.5	BD	61 02 19	1658	60	231	2.60	100.0	159	216
127.0	40.0	26 43.5	114 29.0	BD	61 02 18	1941	145	449	3.23	100.0	343	533
127.0	45.0	26 33.0	114 48.5	BD	61 02 18	2211	138	471	2.92	100.0	291	198
127.0	50.0	26 23.0	115 07.0	BD	61 02 19	0036	139	470	2.95	100.0	69	62
127.0	55.0	26 14.0	115 25.0	BD	61 02 19	0306	141	473	2.98	100.0	37	61
127.0	60.0	26 05.0	115 43.0	BD	61 02 19	0535	137	474	2.88	100.0	97	40
127.0	30.0	26 28.8	113 26.2	HS	61 02 08	0323	134	284	4.71	100.0	489	272
130.0	35.0	26 19.5	113 45.0	HS	61 02 08	0047	106	420	2.52	100.0	659	2107
130.0	40.0	26 09.0	114 07.7	HS	61 02 07	2156	143	530	2.69	100.0	307	135
130.0	45.0	25 59.0	114 27.1	HS	61 02 07	1856	142	519	2.75	100.0	54	36
130.0	50.0	25 49.7	114 45.4	HS	61 02 07	1616	136	558	2.44	100.0	8	44
130.0	55.0	25 38.8	115 04.0	HS	61 02 07	1241	133	546	2.43	100.0	8	49
130.0	60.0	25 29.5	115 23.3	HS	61 02 07	0926	129	558	2.31	100.0	8	153
130.0	70.0	25 09.0	116 02.0	HS	61 02 07	0351	139	503	2.76	100.0	82	353
130.0	80.0	24 49.0	116 38.7	HS	61 02 06	2156	138	502	2.75	100.0	10	35
130.0	90.0	24 29.2	117 14.8	HS	61 02 06	1646	142	509	2.78	100.0	49	52
130.0	100.0	24 09.5	117 52.5	HS	61 02 06	0936	141	500	2.81	100.0	124	419
130.0	120.0	23 31.2	119 11.5	HS	61 02 05	2256	141	492	2.87	100.0	204	54
133.0	30.0	25 49.0	113 16.5	BD	61 02 20	0535	125	480	2.61	100.0	1708	91
133.0	35.0	25 40.6	113 34.0	BD	61 02 20	0240	144	442	3.27	100.0	1148	854
133.0	40.0	25 31.4	113 50.7	BD	61 02 18	2355	142	459	3.10	100.0	29	7
133.0	45.0	25 22.2	114 07.7	BD	61 02 19	2121	142	466	3.04	100.0	2	7
133.0	50.0	25 13.5	114 25.0	BD	61 02 19	1840	135	482	2.81	100.0	39	21
133.0	55.0	25 04.5	114 43.0	BD	61 02 19	1615	139	488	2.85	100.0	24	28
133.0	60.0	24 54.5	115 02.0	BD	61 02 19	1330	144	460	3.12	100.0	2	20
137.0	23.0	25 33.5	112 18.9	HS	61 02 08	1253	54	250	2.17	100.0	1161	112
137.0	30.0	25 21.1	112 48.2	HS	61 02 08	1811	138	534	2.59	100.0	2316	47
137.0	35.0	25 10.6	113 06.1	HS	61 02 08	2046	148	515	2.88	100.0	946	415
137.0	40.0	24 58.9	113 26.9	HS	61 02 09	0011	135	571	2.36	100.0	928	14

TABLE 1. (cont.)

## CalCOFI Cruise 6101

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Tow Date	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
137.0	45.0	24 47.0	113 48.0	HS	61 02 09	0336	0336	141	492	2.86	100.0	93	19
137.0	50.0	24 36.0	114 09.2	HS	61 02 09	0701	0701	136	527	2.57	100.0	50	53
137.0	55.0	24 30.0	114 20.0	HS	61 02 09	0846	0846	137	549	2.50	100.0	31	76
137.0	60.0	24 17.8	114 41.0	HS	61 02 09	1316	1316	134	552	2.43	100.0	9	22
137.0	70.0	23 59.0	115 17.5	HS	61 02 09	1821	1821	132	540	2.45	100.0	34	9
137.0	80.0	23 40.5	115 55.5	HS	61 02 09	2331	2331	139	535	2.59	100.0	34	75

TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line	Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	52.0	37 53.5	123 01.7	HO	61 04 15	1703	54	246	2.18	100.0	1	8
60.0	55.0	37 47.5	123 15.0	HO	61 04 15	1847	122	398	3.05	100.0	18	44
60.0	60.0	37 37.0	123 37.0	HO	61 04 16	2206	132	529	2.49	50.0	1	0
60.0	70.0	37 16.5	124 22.3	HO	61 04 17	0501	152	450	3.38	100.0	27	12
60.0	80.0	36 55.5	125 07.0	HO	61 04 17	1002	147	434	3.40	50.0	13	10
60.0	90.0	36 38.0	125 47.0	HO	61 04 17	1446	137	503	2.72	100.0	30	7
60.0	100.0	36 20.0	126 29.5	HO	61 04 17	1946	158	417	3.80	100.0	6	26
60.0	120.0	35 38.0	128 02.0	HO	61 04 18	0416	139	476	2.92	100.0	13	60
60.0	140.0	35 01.0	129 25.0	HO	61 04 18	1231	134	516	2.60	100.0	3	15
60.0	160.0	34 22.0	130 42.5	HO	61 04 18	2026	165	423	3.89	100.0	28	57
60.0	180.0	33 41.0	132 07.0	HO	61 04 19	0451	139	485	2.87	100.0	92	50
60.0	200.0	33 07.0	133 23.8	HO	61 04 19	1316	126	551	2.29	100.0	53	54
63.0	52.0	37 16.2	122 39.9	HO	61 04 15	1223	53	297	1.78	100.0	23	46
63.0	55.0	37 09.0	122 52.0	HO	61 04 15	1001	154	462	3.32	50.0	18	16
63.0	60.0	37 00.4	123 09.8	HO	61 04 15	0651	161	404	3.98	100.0	18	22
67.0	50.0	36 49.0	122 04.5	HO	61 04 14	1902	71	428	1.66	100.0	52	48
67.0	55.0	36 38.7	122 25.7	HO	61 04 14	2231	130	535	2.42	50.0	70	9
67.0	60.0	36 28.2	122 46.9	HO	61 04 15	0151	158	460	3.44	50.0	3	7
70.0	53.0	36 08.0	121 48.0	HO	61 04 13	0511	149	475	3.13	25.0	9	3
70.0	55.0	36 03.0	122 51.5	HO	61 04 13	0252	137	543	2.52	50.0	53	21
70.0	70.0	35 31.0	123 06.5	HO	61 04 12	1831	153	458	3.34	100.0	93	35
70.0	80.0	35 10.0	123 50.9	HO	61 04 12	1246	135	558	2.41	100.0	16	1169
70.0	90.0	34 52.0	124 29.5	HO	61 04 12	0721	132	549	2.40	100.0	18	85
70.0	100.0	34 31.0	125 12.0	HO	61 04 12	0151	153	445	3.44	100.0	86	193
70.0	120.0	33 48.5	126 41.0	HO	61 04 11	1001	146	489	2.99	100.0	68	75
70.0	200.0	31 12.0	131 55.5	HO	61 04 20	0451	140	512	2.74	100.0	68	19
73.0	60.0	35 29.2	121 27.0	HO	61 04 07	1946	125	566	2.21	50.0	11	8
73.0	53.0	35 15.8	121 56.4	HO	61 04 07	2331	156	480	3.25	100.0	98	41
77.0	51.0	35 01.7	120 55.8	HO	61 04 08	0816	113	608	1.86	100.0	150	37
77.0	55.0	34 54.2	121 13.5	HO	61 04 08	0541	109	544	1.69	100.0	257	139
77.0	57.0	34 49.9	121 22.7	HO	61 04 08	0351	131	544	2.42	100.0	249	79
80.0	52.0	34 25.3	120 35.3	HO	61 04 08	1256	118	494	2.39	100.0	182	141
80.0	55.0	34 19.5	120 48.5	HO	61 04 08	1516	116	631	1.84	100.0	427	95
80.0	60.0	34 10.2	121 10.9	HO	61 04 08	1821	142	534	2.66	100.0	202	60
80.0	65.0	34 01.5	121 31.5	HO	61 04 08	2031	151	495	3.05	100.0	95	138
80.0	70.0	33 43.5	121 52.0	HO	61 04 09	1921	141	543	2.60	100.0	223	133
80.0	80.0	33 28.5	122 32.0	HO	61 04 10	0016	148	507	2.92	100.0	495	21
80.0	90.0	33 08.2	123 13.5	HO	61 04 10	0516	165	434	3.80	100.0	88	151
80.0	100.0	32 48.8	123 54.0	HO	61 04 10	1051	130	586	2.22	100.0	74	87
80.0	120.0	32 07.0	125 18.0	HO	61 04 10	1941	164	450	3.64	100.0	69	25
80.0	200.0	29 28.0	130 38.5	HO	61 04 20	1726	126	543	2.33	100.0	26	11
82.0	47.0	34 15.0	119 58.0	BD	61 04 19	1316	139	512	2.69	100.0	22	44
83.0	40.0	34 14.0	119 22.0	BD	61 04 19	0840	21	128	1.61	100.0	78	494
83.0	43.0	34 08.0	119 34.0	BD	61 04 19	1012	88	362	2.42	100.0	183	77

TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.0	51.0	33 52.0	120 07.5	BD	61 04 20	1027	74	358	2.07	100.0	15	41
83.0	55.0	33 44.0	120 24.5	BD	61 04 20	1226	139	497	2.80	100.0	56	26
83.0	60.0	33 34.0	120 45.0	BD	61 04 20	1516	131	531	2.47	100.0	19	214
83.0	65.0	33 24.0	121 06.0	BD	61 04 20	1841	137	459	2.98	100.0	96	458
83.0	70.0	33 14.0	121 26.0	BD	61 04 20	2111	134	544	2.47	100.0	225	552
83.0	80.0	32 51.5	122 11.0	BD	61 04 21	0156	137	466	2.93	100.0	325	211
83.0	90.0	32 28.0	122 58.0	BD	61 04 21	0706	140	479	2.91	100.0	176	68
87.0	35.0	33 50.0	118 37.5	BD	61 04 22	1506	141	461	3.06	100.0	85	252
87.0	40.0	33 40.0	118 58.0	BD	61 04 22	1241	147	428	3.45	100.0	52	140
87.0	45.0	33 30.0	119 19.0	BD	61 04 22	0931	142	473	3.00	100.0	172	109
87.0	50.0	33 20.0	119 39.5	BD	61 04 22	0713	63	215	2.94	100.0	77	315
87.0	55.0	33 09.0	120 01.0	BD	61 04 22	0436	140	461	3.03	100.0	79	545
87.0	60.0	32 59.0	120 21.5	BD	61 04 22	0206	138	485	2.85	100.0	142	23
87.0	65.0	32 49.5	120 41.5	BD	61 04 21	2326	139	457	3.04	100.0	110	105
87.0	70.0	32 39.5	121 02.0	BD	61 04 21	2051	139	452	3.08	100.0	141	28
87.0	80.0	32 19.5	121 44.0	BD	61 04 21	1626	142	436	3.26	100.0	118	107
87.0	90.0	31 59.0	122 24.0	BD	61 04 21	1131	139	488	2.85	100.0	22	13
90.0	28.0	33 28.4	117 46.5	HO	61 04 25	0116	132	534	2.48	100.0	150	240
90.0	32.0	33 20.0	118 03.5	HO	61 04 24	2234	128	506	2.54	100.0	189	315
90.0	37.0	33 10.8	118 23.8	HO	61 04 24	1316	159	428	3.71	100.0	282	519
90.0	45.0	32 54.5	118 56.5	HO	61 04 24	0921	159	433	3.67	100.0	137	362
90.0	53.0	32 41.0	119 27.0	HO	61 04 24	0451	113	528	2.13	100.0	124	1929
90.0	60.0	32 17.5	119 56.5	HO	61 04 23	2336	123	557	2.21	100.0	51	230
90.0	65.0	32 08.0	120 15.0	HO	61 04 23	1936	142	485	2.92	100.0	158	947
90.0	70.0	31 58.5	120 37.5	HO	61 04 23	1701	138	492	2.81	100.0	108	1054
90.0	80.0	31 40.0	121 20.0	HO	61 04 23	1151	141	490	2.88	100.0	20	53
90.0	90.0	31 23.0	121 58.0	HO	61 04 23	0721	135	480	2.80	100.0	100	7
90.0	100.0	31 03.5	122 38.0	HO	61 04 23	0221	133	476	2.79	100.0	539	54
90.0	120.0	30 23.5	124 01.0	HO	61 04 22	1731	125	560	2.24	100.0	50	24
90.0	140.0	29 45.0	125 19.5	HO	61 04 22	0846	129	518	2.50	100.0	55	78
90.0	160.0	29 05.0	126 40.0	HO	61 04 20	2356	106	614	1.73	100.0	74	88
90.0	180.0	28 26.5	128 01.5	HO	61 04 21	1501	136	512	2.66	100.0	63	23
90.0	200.0	27 44.5	129 23.5	HO	61 04 21	0611	119	586	2.03	100.0	66	13
93.0	28.0	32 54.7	117 21.8	BD	61 04 22	2346	141	461	3.05	100.0	51	205
93.0	30.0	32 50.0	117 31.5	BD	61 04 23	0146	139	478	2.90	100.0	254	127
93.0	35.0	32 40.0	117 52.0	BD	61 04 23	0436	141	473	2.99	100.0	101	102
93.0	40.0	32 30.0	118 12.5	BD	61 04 23	0721	140	472	2.97	100.0	207	483
93.0	45.0	32 20.0	118 33.0	BD	61 04 23	1026	138	473	2.91	100.0	69	261
93.0	50.0	32 10.0	118 52.5	BD	61 04 23	1316	140	392	3.57	100.0	39	420
93.0	55.0	32 00.0	119 13.5	BD	61 04 23	1636	138	413	3.34	100.0	34	109
93.0	60.0	31 51.0	119 34.0	BD	61 04 23	1921	138	478	2.88	100.0	151	77
93.0	65.0	31 40.0	119 54.5	BD	61 04 23	2256	141	484	2.92	100.0	322	37
93.0	70.0	31 30.0	120 15.0	BD	61 04 24	0156	143	388	3.67	100.0	107	172
93.0	80.0	31 08.0	120 57.0	BD	61 04 24	0706	139	414	3.35	100.0	52	40
93.0	90.0	30 50.0	121 34.5	BD	61 04 24	1206	136	424	3.20	100.0	9	27

TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
93.0	100.0	30 30.5	122 15.0	BD	61 04 24	1736	140	3.32	100.0	10	156
97.0	30.0	32 15.5	117 08.5	BD	61 04 26	0939	46	2.60	100.0	50	517
97.0	32.0	32 11.5	117 16.5	BD	61 04 26	0831	140	3.16	100.0	202	80
97.0	35.0	32 02.5	117 27.5	BD	61 04 26	0616	137	3.05	100.0	294	216
97.0	40.0	31 54.0	117 52.0	BD	61 04 26	0336	141	2.89	100.0	185	64
97.0	45.0	31 46.5	118 12.5	BD	61 04 26	0041	142	2.99	100.0	275	174
97.0	50.0	31 39.0	118 32.0	BD	61 04 25	2156	138	2.79	100.0	189	485
97.0	55.0	31 31.5	118 52.0	BD	61 04 25	1706	137	2.95	100.0	58	194
97.0	60.0	31 19.0	119 12.0	BD	61 04 25	1631	139	2.85	100.0	22	66
97.0	65.0	31 07.0	119 33.0	BD	61 04 25	1336	143	3.05	100.0	59	575
97.0	70.0	30 55.0	119 50.5	BD	61 04 25	1041	137	2.66	100.0	10	280
97.0	80.0	30 40.0	120 42.0	BD	61 04 25	0446	139	2.84	100.0	18	111
97.0	90.0	30 17.0	121 17.5	BD	61 04 24	2351	146	3.61	100.0	20	56
100.0	30.0	31 37.0	116 45.0	HO	61 04 26	1913	55	1.84	100.0	120	61
100.0	35.0	31 31.0	117 07.0	HO	61 04 26	2216	137	2.81	100.0	778	114
100.0	40.0	31 23.0	117 29.0	HO	61 04 27	0136	125	2.35	100.0	609	12
100.0	45.0	31 12.0	117 47.0	HO	61 04 27	0356	109	1.91	100.0	132	16
100.0	50.0	31 00.0	118 07.0	HO	61 04 27	0711	137	2.97	100.0	184	357
100.0	55.0	30 50.0	118 25.0	HO	61 04 29	0531	130	2.75	100.0	90	287
100.0	60.0	30 38.9	118 43.8	HO	61 04 29	0841	128	2.55	100.0	27	258
100.0	65.0	30 28.0	119 03.0	HO	61 04 29	1051	132	2.62	100.0	10	273
100.0	70.0	30 18.0	119 23.0	HO	61 04 29	1351	132	2.59	100.0	11	348
100.0	80.0	29 57.0	120 03.1	HO	61 04 29	1901	122	2.22	100.0	13	9
100.0	90.0	29 37.2	120 44.5	HO	61 04 30	0006	118	2.26	100.0	79	77
100.0	100.0	29 18.0	121 25.8	HO	61 04 30	0516	140	2.96	100.0	39	86
100.0	120.0	28 38.1	122 46.8	HO	61 04 30	1430	136	2.53	100.0	186	134
103.0	30.0	31 05.0	116 24.5	BD	61 04 28	0119	48	2.18	100.0	9	39
103.0	35.0	30 55.0	116 43.0	BD	61 04 28	0446	141	2.95	100.0	307	92
103.0	40.0	30 43.2	117 05.2	BD	61 04 28	0621	139	3.13	100.0	26	25
103.0	45.0	30 32.8	117 23.5	BD	61 04 28	0831	140	2.90	100.0	18	22
103.0	50.0	30 26.0	117 44.5	BD	61 04 28	1046	142	2.87	100.0	24	37
103.0	55.0	30 19.5	117 56.0	BD	61 04 28	1306	143	2.84	100.0	12	233
103.0	60.0	30 10.5	118 17.0	BD	61 04 28	1546	145	2.91	100.0	21	333
103.0	65.0	30 00.0	118 37.0	BD	61 04 28	1811	140	2.79	100.0	33	193
103.0	70.0	29 52.0	118 53.5	BD	61 04 28	1951	138	2.86	100.0	109	181
103.0	80.0	29 33.0	119 31.0	BD	61 04 29	0056	139	2.73	100.0	10	70
103.0	90.0	29 15.0	120 08.0	BD	61 04 29	0546	142	2.75	100.0	33	373
107.0	32.0	30 25.8	116 11.0	BD	61 04 30	1801	137	2.92	100.0	105	1894
107.0	35.0	30 20.0	116 22.5	BD	61 04 30	1606	147	3.22	100.0	17	33
107.0	40.0	30 10.0	116 43.0	BD	61 04 30	1251	144	3.04	100.0	17	86
107.0	45.0	29 59.0	117 03.0	BD	61 04 30	1036	138	2.72	100.0	14	109
107.0	50.0	29 50.5	117 23.5	BD	61 04 30	0821	142	2.87	100.0	21	212
107.0	55.0	29 40.0	117 43.0	BD	61 04 30	0541	144	2.88	100.0	23	118
107.0	60.0	29 32.0	118 01.5	BD	61 04 30	0246	145	2.97	100.0	140	266
107.0	65.0	29 21.0	118 21.0	BD	61 04 29	2351	138	2.57	100.0	73	560

TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
107.0	70.0	29 11.0	118 40.0	BD	61 04 29	2111	136	549	2.47	100.0	64	69
107.0	80.0	28 51.5	119 19.5	BD	61 04 29	1521	136	533	2.56	100.0	18	268
107.0	90.0	28 32.0	119 59.0	BD	61 04 29	1021	138	499	2.77	100.0	27	64
110.0	33.0	29 50.0	115 52.2	HO	61 05 03	1933	72	306	2.36	100.0	26	119
110.0	35.0	29 41.3	115 56.7	HO	61 05 03	1731	135	507	2.66	100.0	33	213
110.0	40.0	29 33.0	116 13.5	HO	61 05 03	1411	112	562	2.00	100.0	156	132
110.0	45.0	29 24.8	116 34.0	HO	61 05 03	1036	135	504	2.67	100.0	717	20
110.0	50.0	29 15.0	116 56.0	HO	61 05 03	0736	155	454	3.41	100.0	41	56
110.0	55.0	29 05.5	117 16.5	HO	61 05 03	0406	156	454	3.43	100.0	174	45
110.0	60.0	28 56.5	117 38.0	HO	61 05 03	0046	123	482	2.55	100.0	173	160
110.0	65.0	28 47.0	117 58.5	HO	61 05 02	2021	141	502	2.80	100.0	85	165
110.0	70.0	28 37.0	118 17.5	HO	61 05 02	1136	134	487	2.75	100.0	134	96
110.0	80.0	28 14.0	118 57.0	HO	61 05 02	0441	150	436	3.43	100.0	407	125
110.0	90.0	27 53.0	119 39.0	HO	61 05 01	2256	144	459	3.14	100.0	135	204
110.0	100.0	27 34.0	120 20.0	HO	61 05 01	1651	142	476	2.97	100.0	92	121
110.0	120.0	26 52.0	122 46.0	HO	61 05 01	0411	130	522	2.49	100.0	426	91
113.0	30.0	29 22.0	115 18.0	BD	61 05 01	0208	47	202	2.32	100.0	11	130
113.0	35.0	29 11.5	115 38.0	BD	61 05 01	0506	137	503	2.71	100.0	184	204
113.0	40.0	29 02.0	115 57.0	BD	61 05 02	0836	136	531	2.56	100.0	41	136
113.0	45.0	28 51.5	116 17.5	BD	61 05 01	1041	136	458	2.98	100.0	116	136
113.0	50.0	28 42.0	116 34.0	BD	61 05 01	1341	135	519	2.61	100.0	22	62
113.0	55.0	28 32.7	117 01.0	BD	61 05 01	1706	129	546	2.36	100.0	26	25
113.0	60.0	28 25.0	117 17.0	BD	61 05 01	1921	133	515	2.58	100.0	52	31
113.0	65.0	28 14.5	117 36.0	BD	61 05 01	2201	138	490	2.82	100.0	71	4
113.0	70.0	28 04.0	117 55.0	BD	61 05 02	0040	140	532	2.63	100.0	32	44
113.0	80.0	27 42.0	118 33.5	BD	61 05 02	0606	138	492	2.81	100.0	21	73
113.0	90.0	27 22.0	119 07.0	BD	61 05 02	1051	135	514	2.62	100.0	8	40
117.0	26.0	28 56.0	114 41.5	BD	61 05 04	2238	74	338	2.21	100.0	11	385
117.0	30.0	28 48.0	114 56.5	BD	61 05 04	2033	85	337	2.53	100.0	9	1542
117.0	35.0	28 38.0	115 16.0	BD	61 05 04	1736	138	517	2.67	100.0	336	52
117.0	40.0	28 28.0	115 35.5	BD	61 05 03	1906	142	491	2.89	100.0	335	50
117.0	45.0	28 18.0	115 56.0	BD	61 05 03	1606	139	518	2.69	100.0	26	15
117.0	50.0	28 08.0	116 15.0	BD	61 05 03	1256	145	493	2.94	100.0	33	7
117.0	55.0	28 01.0	116 35.5	BD	61 05 03	1021	136	546	2.49	100.0	139	17
117.0	60.0	27 42.0	116 52.0	BD	61 05 03	0706	142	489	2.90	100.0	26	41
117.0	65.0	27 33.5	117 15.0	BD	61 05 03	0406	138	467	2.96	100.0	201	68
117.0	70.0	27 25.0	117 33.0	BD	61 05 03	0106	138	540	2.56	100.0	86	82
117.0	80.0	27 08.0	118 10.5	BD	61 05 02	1956	140	530	2.65	100.0	113	118
117.0	90.0	26 50.0	118 45.0	BD	61 05 02	1500	142	523	2.71	100.0	14	63
118.0	39.0	28 18.5	115 23.7	BD	61 05 03	2106	133	564	2.36	100.0	42	144
120.0	25.0	28 22.5	114 15.0	BD	61 05 05	0313	48	213	2.27	100.0	39	1507
120.0	30.0	28 13.0	114 34.0	BD	61 05 05	0533	74	306	2.42	100.0	38	1402
120.0	35.0	28 03.0	114 54.0	BD	61 05 05	0813	76	319	2.38	100.0	102	153
120.0	40.0	27 56.5	115 14.0	BD	61 05 05	1516	36	216	1.67	100.0	24	648
120.0	40.0	27 56.0	115 14.0	HO	61 05 04	1604	35	147	2.40	100.0	182	143



TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
120.0	45.0	27 42.0	115 34.0	HO	61 05 04	1921	137	527	2.60	50.0	1028	213
120.0	50.0	27 32.5	115 54.0	HO	61 05 04	2241	133	522	2.54	100.0	376	107
120.0	55.0	27 23.0	116 13.0	HO	61 05 05	0106	117	562	2.09	100.0	1070	44
120.0	60.0	27 13.5	116 31.5	HO	61 05 05	0421	139	500	2.78	100.0	277	84
120.0	65.0	27 04.5	116 51.5	HO	61 05 05	0636	120	521	2.31	100.0	112	196
120.0	70.0	26 53.0	117 09.2	HO	61 05 05	0946	140	495	2.82	100.0	47	241
120.0	80.0	26 32.3	117 49.0	HO	61 05 05	1446	133	546	2.43	100.0	19	173
120.0	90.0	26 12.5	118 29.0	HO	61 05 05	1951	124	535	2.32	100.0	264	41
120.0	100.0	25 52.5	119 07.5	HO	61 05 06	0051	126	556	2.28	100.0	176	137
120.0	120.0	25 13.0	120 22.0	HO	61 05 06	0931	138	503	2.74	100.0	76	97
123.0	37.0	27 24.0	114 40.0	BD	61 05 05	2008	55	205	2.70	100.0	20	312
123.0	42.0	27 14.0	114 59.0	BD	61 05 05	2236	141	469	3.01	100.0	112	19
123.0	45.0	27 08.0	115 10.5	BD	61 05 06	0026	139	530	2.62	100.0	135	90
123.0	50.0	26 58.0	115 31.0	BD	61 05 06	0331	137	558	2.46	100.0	111	50
123.0	55.0	26 47.5	115 50.5	BD	61 05 06	0616	138	503	2.75	100.0	37	34
123.0	60.0	26 35.0	116 09.5	BD	61 05 06	0906	139	484	2.87	100.0	22	50
123.0	65.0	26 25.5	116 28.3	BD	61 05 06	1136	140	524	2.66	100.0	24	42
123.0	70.0	26 19.0	116 47.0	BD	61 05 06	1406	140	552	2.53	100.0	20	67
123.0	80.0	25 59.0	117 25.5	BD	61 05 06	1906	140	518	2.71	100.0	75	78
127.0	34.0	26 55.0	114 06.5	BD	61 05 08	0118	70	264	2.65	100.0	144	212
127.0	40.0	26 43.5	114 29.0	BD	61 05 07	2241	142	487	2.92	100.0	426	18
127.0	45.0	26 33.0	114 48.5	BD	61 05 07	1946	138	545	2.53	100.0	72	44
127.0	50.0	26 23.0	115 08.0	BD	61 05 07	1651	136	522	2.60	100.0	5	12
127.0	55.0	26 13.5	115 27.0	BD	61 05 07	1346	143	518	2.76	100.0	10	9
127.0	60.0	26 05.5	115 45.8	BD	61 05 07	1101	136	532	2.55	100.0	13	29
127.0	65.0	25 58.0	116 08.0	BD	61 05 07	0811	141	537	2.62	100.0	7	48
127.0	70.0	25 48.0	116 31.3	BD	61 05 07	0451	139	524	2.65	100.0	22	20
127.0	80.0	25 24.0	117 02.5	BD	61 05 06	2316	131	555	2.36	100.0	26	66
130.0	30.0	26 29.3	113 29.0	HO	61 05 09	0253	50	225	2.24	100.0	12	3
130.0	35.0	26 15.0	113 47.0	HO	61 05 08	2211	143	484	2.95	100.0	325	32
130.0	40.0	26 12.0	114 08.5	HO	61 05 08	1911	104	600	1.73	100.0	217	26
130.0	45.0	26 03.0	114 30.0	HO	61 05 08	1536	143	473	3.01	100.0	30	29
130.0	50.0	25 53.0	114 51.5	HO	61 05 08	1251	158	471	3.36	100.0	70	94
130.0	55.0	25 43.0	115 11.0	HO	61 05 08	0921	137	509	2.69	100.0	36	88
130.0	60.0	25 33.0	115 30.0	HO	61 05 08	0646	164	420	3.91	100.0	53	68
130.0	70.0	25 12.5	116 08.0	HO	61 05 08	0056	140	515	2.72	100.0	156	98
130.0	80.0	24 51.5	116 46.5	HO	61 05 07	1836	142	492	2.89	100.0	54	1
130.0	90.0	24 31.5	117 20.0	HO	61 05 07	1311	120	579	2.07	100.0	88	25
130.0	100.0	24 11.0	117 56.0	HO	61 05 07	0746	132	513	2.58	100.0	160	62
130.0	120.0	23 30.0	119 10.0	HO	61 05 06	2241	142	512	2.77	100.0	409	24
133.0	25.0	26 04.5	112 48.0	BD	61 05 08	1238	72	334	2.16	100.0	2	25
133.0	30.0	25 53.7	113 07.0	BD	61 05 08	1506	133	550	2.42	100.0	0	25
133.0	35.0	25 42.2	113 25.0	BD	61 05 08	1741	141	492	2.87	100.0	7	5
133.0	40.0	25 34.5	113 45.5	BD	61 05 08	2006	142	464	3.06	100.0	73	32
133.0	45.0	25 24.5	114 04.5	BD	61 05 08	2306	141	479	2.93	100.0	287	135

TABLE 1. (cont.)

## CalCOFI Cruise 6104

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
133.0	50.0	25 14.0	114 24.0	BD	61 05 09	0131	136	514	2.64	100.0	84	43
133.0	55.0	25 03.5	114 42.0	BD	61 05 09	0411	140	483	2.91	100.0	87	69
133.0	60.0	24 54.5	115 02.0	BD	61 05 09	0651	140	482	2.91	100.0	15	78
133.0	65.0	24 43.5	115 20.0	BD	61 05 09	0936	140	495	2.82	100.0	2	10
133.0	70.0	24 34.0	115 40.5	BD	61 05 09	1226	137	509	2.70	100.0	1	30
133.0	80.0	24 14.5	116 17.0	BD	61 05 09	1716	140	488	2.86	100.0	42	13
137.0	23.0	25 33.7	112 21.0	HO	61 05 09	2308	46	252	1.82	100.0	15	398
137.0	30.0	25 18.7	112 47.5	HO	61 05 10	0246	137	494	2.78	100.0	2	22
137.0	35.0	25 08.7	113 05.7	HO	61 05 10	0506	544	125	2.29	100.0	5	13
137.0	40.0	24 59.5	113 24.3	HO	61 05 10	0811	147	482	3.04	100.0	5	27
137.0	45.0	24 48.0	113 43.0	HO	61 05 10	1026	141	507	2.78	100.0	7	12
137.0	50.0	24 36.0	114 02.5	HO	61 05 10	1401	140	505	2.77	100.0	7	21
137.0	55.0	24 25.0	114 21.5	HO	61 05 11	0526	125	567	2.21	100.0	0	45
137.0	60.0	24 17.0	114 36.0	HO	61 05 11	0801	134	529	2.53	100.0	4	10
137.0	70.0	23 54.0	115 15.5	HO	61 05 11	1251	148	507	2.93	100.0	5	15
137.0	80.0	23 39.5	115 55.5	HO	61 05 11	1726	140	485	2.88	100.0	13	6

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	52.0	37 54.8	123 02.0	HO	61 07 06	1243	76	3.33	100.0	1	28
60.0	55.0	37 45.9	123 15.0	HO	61 07 06	1411	164	4.45	100.0	6	3
60.0	60.0	37 37.0	123 37.1	HO	61 07 06	1821	102	1.86	100.0	6	8
60.0	70.0	37 19.0	124 21.0	HO	61 07 06	2331	120	2.32	100.0	91	12
60.0	80.0	36 58.0	125 04.0	HO	61 07 07	0430	116	2.26	100.0	6	3
60.0	90.0	31 25.0	121 59.0	HO	61 07 07	1026	158	3.80	100.0	2	6
60.0	100.0	36 17.0	126 32.0	HO	61 07 07	1621	103	1.77	100.0	6	22
60.0	120.0	35 39.2	127 58.8	HO	61 07 08	0136	141	2.88	100.0	95	40
60.0	140.0	35 01.0	129 24.5	HO	61 07 08	1146	141	2.82	100.0	16	38
60.0	160.0	34 21.5	130 44.0	HO	61 07 08	2026	136	2.84	100.0	67	29
60.0	180.0	33 41.0	132 04.8	HO	61 07 09	0416	120	2.27	100.0	100	40
60.0	200.0	33 00.0	133 25.1	HO	61 07 09	1351	165	4.19	100.0	39	15
63.0	52.0	37 19.0	122 36.0	HO	61 07 05	0141	41	1.13	100.0	15	74
63.0	55.0	37 13.2	122 50.2	HO	61 07 05	0141	131	2.29	100.0	120	29
63.0	60.0	37 03.0	123 11.0	HO	61 07 04	2241	142	2.65	100.0	8	35
67.0	50.0	36 49.0	122 04.5	HO	61 07 04	1008	61	2.19	100.0	4	247
67.0	55.0	36 39.0	122 26.0	HO	61 07 04	1421	140	2.74	100.0	16	18
67.0	60.0	36 27.7	122 46.5	HO	61 07 04	1746	156	3.27	100.0	96	437
70.0	53.0	36 06.5	121 54.0	HO	61 07 04	0441	137	3.00	100.0	22	7
70.0	55.0	36 03.0	122 02.0	HO	61 07 04	0156	163	3.93	100.0	52	58
70.0	60.0	35 53.0	122 22.5	HO	61 07 03	2346	162	3.86	100.0	199	84
70.0	70.0	35 33.0	123 06.0	HO	61 07 03	1801	155	3.26	100.0	47	35
70.0	80.0	35 13.0	123 48.0	HO	61 07 03	1106	159	3.71	100.0	9	99
70.0	90.0	34 52.0	124 30.0	HO	61 07 03	0551	137	2.84	100.0	30	225
70.0	100.0	34 34.0	125 09.0	HO	61 07 03	0016	162	3.74	100.0	143	42
70.0	120.0	33 53.0	126 32.0	HO	61 07 02	1341	96	1.48	100.0	37	23
70.0	200.0	31 09.9	132 06.7	HO	61 07 10	0306	161	3.88	100.0	67	5
73.0	53.0	35 31.7	121 54.0	HO	61 06 28	1916	91	1.38	100.0	64	38
73.0	60.0	35 18.0	120 52.7	HO	61 06 28	2351	121	2.16	100.0	222	124
77.0	51.0	35 02.0	120 52.7	HO	61 06 29	1556	94	1.79	100.0	15	6
77.0	55.0	34 54.0	121 09.5	HO	61 06 29	1751	108	1.78	100.0	18	6
77.0	57.0	34 50.1	121 18.0	HO	61 06 29	0816	158	3.53	100.0	37	28
80.0	52.0	34 24.0	120 35.6	HO	61 06 30	0021	156	3.14	100.0	32	8
80.0	55.0	34 19.0	120 48.0	HO	61 06 30	0336	105	1.81	100.0	92	13
80.0	60.0	34 09.0	121 09.0	HO	61 06 30	0756	164	3.47	100.0	310	43
80.0	65.0	33 58.4	121 30.4	HO	61 06 30	0942	114	2.17	100.0	149	65
80.0	70.0	33 48.2	121 50.8	HO	61 06 30	1441	132	3.34	100.0	141	162
80.0	80.0	33 29.0	122 31.4	HO	61 06 30	2116	117	2.02	100.0	68	88
80.0	90.0	33 09.0	123 12.9	HO	61 07 01	0316	106	1.97	100.0	70	14
80.0	100.0	32 49.0	123 53.0	HO	61 07 01	0821	159	3.73	100.0	12	25
80.0	120.0	32 09.0	125 15.0	HO	61 07 01	1926	137	2.81	100.0	25	57
80.0	200.0	29 22.0	130 46.6	HO	61 07 10	1716	136	2.78	100.0	36	13
82.0	47.0	34 15.0	119 58.0	BD	61 07 12	1056	131	2.81	100.0	3	59
83.0	40.0	34 14.0	119 22.0	BD	61 07 12	0653	28	1.34	100.0	25	53
83.0	43.0	34 08.0	119 34.0	BD	61 07 12	0821	136	2.94	100.0	8	45

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.0	51.0	33 52.0	120 08.0	BD	61 07 12	1453	66	186	100.0	156	145
83.0	55.0	33 44.0	120 24.5	BD	61 07 12	1716	134	455	100.0	20	6
83.0	60.0	33 34.0	120 45.0	BD	61 07 12	1936	140	466	100.0	331	15
83.0	65.0	33 24.0	121 06.0	BD	61 07 12	2321	136	465	100.0	960	16
83.0	70.0	33 14.5	121 26.0	BD	61 07 13	0220	141	486	100.0	376	11
83.0	80.0	32 55.5	122 05.0	BD	61 07 13	0711	139	476	100.0	91	9
83.0	90.0	32 34.5	122 47.5	BD	61 07 13	1236	142	481	100.0	7	7
87.0	35.0	33 50.0	118 37.5	BD	61 07 14	2246	136	475	100.0	271	146
87.0	40.0	33 40.0	118 58.0	BD	61 07 14	1951	135	467	50.0	13	1
87.0	45.0	33 30.0	119 19.0	BD	61 07 14	1720	135	486	100.0	2	2
87.0	50.0	33 20.0	119 39.5	BD	61 07 14	1453	47	231	100.0	23	88
87.0	55.0	33 04.5	120 02.6	BD	61 07 14	1121	132	462	100.0	12	4
87.0	60.0	33 00.0	120 21.5	BD	61 07 14	0856	139	490	50.0	45	3
87.0	65.0	32 49.5	120 41.5	BD	61 07 14	0656	138	469	100.0	71	8
87.0	70.0	32 39.5	121 02.0	BD	61 07 14	0356	141	479	100.0	132	63
87.0	80.0	32 19.5	121 43.0	BD	61 07 13	2216	141	495	100.0	17	7
87.0	90.0	31 59.0	122 24.0	BD	61 07 13	1706	143	481	100.0	12	57
90.0	28.0	33 28.4	117 46.7	HO	61 07 15	0441	119	558	100.0	137	611
90.0	32.0	33 20.3	118 03.0	HO	61 07 15	0209	159	416	100.0	10	1
90.0	37.0	33 10.6	118 23.6	HO	61 07 14	1351	159	404	100.0	2	6
90.0	45.0	32 56.3	118 56.7	HO	61 07 14	0956	130	459	13.0	1	5
90.0	53.0	32 38.8	119 28.8	HO	61 07 14	0626	132	486	100.0	10	8
90.0	60.0	32 22.1	119 56.2	HO	61 07 14	0236	129	492	100.0	30	22
90.0	65.0	32 12.9	120 16.1	HO	61 07 13	2306	161	390	100.0	31	8
90.0	70.0	32 03.2	120 37.2	HO	61 07 13	2046	127	481	100.0	65	8
90.0	80.0	31 44.9	121 19.0	HO	61 07 13	1546	133	526	100.0	15	18
90.0	90.0	31 25.0	121 59.0	HO	61 07 13	1101	134	484	100.0	9	8
90.0	100.0	31 05.0	122 39.1	HO	61 07 13	0516	133	515	100.0	16	109
90.0	120.0	30 24.0	123 59.2	HO	61 07 12	2046	142	480	100.0	190	135
90.0	140.0	29 44.3	125 15.8	HO	61 07 12	1141	133	520	100.0	60	15
90.0	160.0	29 02.0	126 34.9	HO	61 07 12	0201	148	497	100.0	91	4
90.0	180.0	28 20.2	127 54.3	HO	61 07 11	1651	145	469	100.0	10	13
90.0	200.0	27 42.1	129 15.0	HO	61 07 11	0726	140	491	100.0	15	8
93.0	28.0	32 54.7	117 21.8	BD	61 07 15	0841	139	491	100.0	14	21
93.0	30.0	32 50.5	117 31.0	BD	61 07 15	1036	133	496	100.0	10	0
93.0	35.0	32 40.5	117 51.5	BD	61 07 15	1436	137	510	100.0	9	3
93.0	40.0	32 29.8	118 13.0	BD	61 07 15	1756	136	497	100.0	0	4
93.0	45.0	32 20.0	118 32.0	BD	61 07 15	2051	136	489	100.0	30	11
93.0	50.0	32 10.0	118 52.5	BD	61 07 15	2326	139	446	100.0	69	37
93.0	55.0	32 00.0	119 13.5	BD	61 07 16	0246	135	453	100.0	33	59
93.0	60.0	31 50.0	119 34.0	BD	61 07 16	0526	137	446	100.0	44	832
93.0	80.0	31 10.0	120 54.5	BD	61 07 16	1801	138	451	100.0	16	20
93.0	90.0	30 50.0	121 34.5	BD	61 07 16	2311	137	443	100.0	30	77
93.0	100.0	30 30.5	122 14.0	BD	61 07 17	0421	137	454	100.0	45	49
97.0	30.0	32 16.0	117 07.0	BD	61 07 18	1754	40	273	100.0	284	1575

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
97.0	32.0	32 12.0	117 15.2	BD	61 07 18	1641	133	496	2.68	100.0	8	3
97.0	35.0	32 05.5	117 27.5	BD	61 07 18	1506	138	466	2.97	100.0	5	2
97.0	40.0	31 56.0	117 48.0	BD	61 07 18	1221	137	450	3.04	100.0	6	4
97.0	45.0	31 46.0	118 08.5	BD	61 07 18	0931	134	458	2.93	100.0	17	3
97.0	50.0	31 36.0	118 29.0	BD	61 07 18	0701	140	454	3.08	100.0	11	8
97.0	55.0	31 29.5	118 40.0	BD	61 07 18	0536	140	454	3.08	100.0	5	6
97.0	60.0	31 18.0	119 02.5	BD	61 07 18	0311	138	412	3.35	100.0	17	19
97.0	65.0	31 07.0	119 26.0	BD	61 07 18	0016	136	458	2.98	100.0	28	30
97.0	70.0	30 55.5	119 49.2	BD	61 07 16	2221	140	455	3.07	100.0	29	119
97.0	80.0	30 33.0	120 34.0	BD	61 07 17	1556	140	460	3.04	100.0	11	299
97.0	90.0	30 15.5	121 10.5	BD	61 07 17	1101	138	453	3.05	100.0	2	135
100.0	30.0	31 40.9	116 46.9	HO	61 07 16	2031	146	485	3.01	100.0	91	12
100.0	35.0	31 32.2	117 06.0	HO	61 07 15	2356	170	372	4.57	100.0	15	6
100.0	40.0	31 24.2	117 24.8	HO	61 07 17	0301	146	451	3.23	100.0	16	367
100.0	45.0	31 15.6	117 43.8	HO	61 07 17	0516	146	440	3.32	100.0	10	32
100.0	50.0	31 07.2	118 02.0	HO	61 07 17	0816	117	528	2.21	100.0	34	64
100.0	55.0	30 59.0	118 21.0	HO	61 07 17	1101	138	459	3.00	100.0	1	15
100.0	60.0	30 46.0	118 45.0	HO	61 07 17	1516	108	491	2.20	100.0	5	68
100.0	65.0	30 33.6	119 07.0	HO	61 07 17	1921	125	492	2.55	100.0	16	164
100.0	70.0	30 21.5	119 28.0	HO	61 07 17	2321	126	492	2.56	100.0	24	212
100.0	80.0	30 01.0	120 07.7	HO	61 07 18	0426	103	510	2.01	100.0	32	237
100.0	90.0	29 42.0	120 47.0	HO	61 07 18	1026	130	469	2.77	100.0	27	43
100.0	100.0	29 21.2	121 26.7	HO	61 07 18	1626	120	517	2.33	100.0	37	31
100.0	120.0	28 41.2	122 46.5	HO	61 07 19	0221	129	513	2.51	100.0	143	11
103.0	30.0	31 06.0	116 24.5	BD	61 07 21	0303	63	237	2.66	100.0	30	154
103.0	35.0	30 56.0	116 45.0	BD	61 07 21	0541	135	476	2.84	100.0	18	10
103.0	40.0	30 46.0	117 04.5	BD	61 07 21	0811	138	481	2.87	100.0	6	4
103.0	45.0	30 36.0	117 24.0	BD	61 07 21	1036	138	463	2.98	100.0	23	9
103.0	50.0	30 26.0	117 44.5	BD	61 07 21	1321	142	471	3.02	100.0	8	27
103.0	55.0	30 16.0	118 05.0	BD	61 07 21	1601	138	461	3.00	100.0	56	186
103.0	60.0	30 06.0	118 25.0	BD	61 07 21	1841	139	464	2.99	100.0	32	54
103.0	65.0	29 56.5	118 44.0	BD	61 07 21	2121	148	445	3.32	100.0	66	34
103.0	70.0	29 46.5	119 04.0	BD	61 07 22	0011	141	454	3.09	100.0	104	281
103.0	80.0	29 26.5	119 44.0	BD	61 07 22	0501	144	453	3.18	100.0	50	346
103.0	90.0	29 07.0	120 23.5	BD	61 07 22	0951	140	475	2.94	100.0	12	33
107.0	32.0	30 25.8	116 11.0	BD	61 07 23	2001	115	571	2.02	100.0	72	145
107.0	35.0	30 21.5	116 22.5	BD	61 07 23	1821	128	500	2.57	100.0	3	3
107.0	40.0	30 08.2	116 42.8	BD	61 07 23	1546	127	512	2.48	100.0	14	58
107.0	45.0	30 02.0	117 02.5	BD	61 07 23	1336	128	533	2.41	100.0	4	2
107.0	50.0	29 45.3	117 24.3	BD	61 07 23	1056	140	491	2.85	100.0	32	8
107.0	55.0	29 41.0	117 42.0	BD	61 07 23	0841	137	479	2.85	100.0	29	8
107.0	60.0	29 32.0	118 01.5	BD	61 07 23	0611	140	492	2.84	100.0	85	376
107.0	65.0	29 21.0	118 21.0	BD	61 07 23	0326	140	478	2.92	100.0	251	54
107.0	70.0	29 11.0	118 41.0	BD	61 07 23	0101	145	462	3.14	100.0	130	126
107.0	80.0	28 51.5	119 20.5	BD	61 07 22	2016	141	489	2.88	100.0	80	60

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
107.0	90.0	28 29.0	120 05.5	BD	61 07 22	1426	143	477	3.00	100.0	13	27
110.0	33.0	29 49.2	115 51.5	HO	61 07 21	1558	81	214	3.78	100.0	7	70
110.0	35.0	29 46.8	116 00.2	HO	61 07 21	1456	119	547	2.17	100.0	16	45
110.0	40.0	29 37.0	116 18.4	HO	61 07 21	1126	161	400	4.02	100.0	7	11
110.0	45.0	29 26.0	116 38.3	HO	61 07 21	0811	130	458	2.85	100.0	12	68
110.0	50.0	29 14.8	116 57.7	HO	61 07 21	0531	129	477	2.72	100.0	10	64
110.0	55.0	29 04.0	117 16.8	HO	61 07 21	0206	145	454	3.18	100.0	45	50
110.0	60.0	28 52.8	117 36.8	HO	61 07 20	2341	124	504	2.47	100.0	81	162
110.0	65.0	28 44.0	117 56.5	HO	61 07 20	2026	113	583	1.94	100.0	93	81
110.0	70.0	28 36.4	118 18.0	HO	61 07 20	1721	149	445	3.35	100.0	54	38
110.0	80.0	28 18.3	118 54.0	HO	61 07 20	1256	148	445	3.28	100.0	18	25
110.0	90.0	27 57.5	119 34.0	HO	61 07 20	0616	126	529	2.38	100.0	50	51
110.0	100.0	27 37.8	120 13.8	HO	61 07 20	0051	116	552	2.10	100.0	411	17
110.0	120.0	26 56.3	121 35.0	HO	61 07 19	1521	124	530	2.34	100.0	64	7
113.0	35.0	29 12.0	115 38.0	BD	61 07 24	0701	132	507	2.60	100.0	7	30
113.0	40.0	29 02.8	115 57.0	BD	61 07 24	0926	135	490	2.76	100.0	6	9
113.0	45.0	28 52.0	116 18.0	BD	61 07 24	1256	134	468	2.87	100.0	6	12
113.0	50.0	28 41.5	116 36.5	BD	61 07 24	1426	143	446	3.20	100.0	7	27
113.0	55.0	28 32.0	116 57.0	BD	61 07 25	1656	142	465	2.92	100.0	1	11
113.0	60.0	28 22.0	117 16.5	BD	61 07 24	1906	138	489	2.81	100.0	39	118
113.0	65.0	28 12.0	117 36.0	BD	61 07 24	2121	138	483	2.85	100.0	50	383
113.0	70.0	28 02.0	117 55.0	BD	61 07 24	2336	141	462	3.04	100.0	34	0
113.0	80.0	27 42.0	118 33.5	BD	61 07 25	0351	135	472	2.87	100.0	10	103
113.0	90.0	27 22.0	119 12.0	BD	61 07 25	0816	134	485	2.77	100.0	17	166
115.0	35.0	28 54.5	115 26.3	BD	61 07 31	0751	117	528	2.21	100.0	65	107
117.0	26.0	28 56.0	114 41.5	BD	61 07 27	0233	67	257	2.60	100.0	18	422
117.0	30.0	28 48.0	114 56.5	BD	61 07 27	0022	83	293	2.82	100.0	46	2645
117.0	35.0	28 38.0	115 16.0	BD	61 07 26	2136	143	449	3.19	100.0	44	16
117.0	40.0	28 28.0	115 35.5	BD	61 07 26	1431	142	484	2.93	100.0	4	4
117.0	45.0	28 18.0	115 56.0	BD	61 07 26	1136	141	476	2.97	100.0	13	62
117.0	50.0	28 08.0	116 15.0	BD	61 07 26	0901	139	476	2.93	100.0	6	43
117.0	55.0	27 58.0	116 34.5	BD	61 07 26	0621	139	480	2.89	100.0	13	76
117.0	60.0	27 50.0	116 49.5	BD	61 07 26	0411	139	474	2.93	100.0	37	1081
117.0	65.0	27 39.0	117 11.5	BD	61 07 26	0126	139	493	2.82	100.0	42	142
117.0	70.0	27 28.0	117 31.5	BD	61 07 25	2241	139	500	2.75	100.0	12	65
117.0	80.0	27 12.0	118 11.0	BD	61 07 25	1746	139	475	2.93	100.0	11	53
117.0	90.0	26 47.5	118 49.0	BD	61 07 25	1241	145	461	3.14	100.0	6	0
118.0	39.0	28 18.5	115 23.7	BD	61 07 26	1841	142	465	3.06	100.0	4	15
119.0	33.0	28 19.1	114 54.0	BD	61 07 31	0223	56	291	3.06	100.0	168	18
120.0	25.0	28 22.5	114 15.0	BD	61 07 27	0704	42	193	2.18	100.0	31	122
120.0	30.0	28 13.0	114 34.0	BD	61 07 27	1143	85	292	2.90	100.0	80	3028
120.0	35.0	28 03.0	114 54.0	BD	61 07 27	1353	82	294	2.78	100.0	133	93
120.0	40.0	27 56.5	115 14.0	BD	61 07 27	2129	26	111	2.37	100.0	34	301
120.0	40.0	27 56.0	115 14.7	HO	61 07 22	1543	30	137	2.20	100.0	40	898
120.0	45.0	27 44.3	115 31.9	HO	61 07 22	1901	122	551	2.21	100.0	20	103

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
120.0	50.0	27 33.0	115 53.0	HO	61 07 22	2351	133	493	2.70	100.0	119	109
120.0	55.0	27 23.8	116 12.5	HO	61 07 23	0206	114	563	2.02	100.0	203	20
120.0	60.0	27 14.5	116 30.0	HO	61 07 23	0531	129	498	2.60	100.0	57	20
120.0	65.0	27 06.0	116 48.0	HO	61 07 23	0756	130	483	2.69	100.0	22	18
120.0	70.0	26 56.0	117 08.0	HO	61 07 23	1131	135	496	2.71	100.0	71	22
120.0	80.0	26 35.5	117 47.8	HO	61 07 23	1751	130	493	2.64	100.0	42	14
120.0	90.0	26 16.0	118 26.0	HO	61 07 23	2316	131	476	2.75	100.0	24	25
120.0	100.0	25 56.9	119 04.2	HO	61 07 24	0446	119	545	2.19	100.0	259	36
120.0	120.0	25 17.9	120 21.0	HO	61 07 24	1341	121	505	2.40	100.0	42	4
123.0	37.0	27 24.0	114 40.0	BD	61 07 28	0248	56	201	2.78	100.0	5	78
123.0	42.0	27 14.0	114 59.0	BD	61 07 28	0511	139	450	3.09	100.0	8	56
123.0	45.0	27 08.0	115 11.5	BD	61 07 28	0651	140	442	3.17	100.0	38	643
123.0	50.0	26 58.0	115 31.0	BD	61 07 28	0926	140	466	3.01	100.0	29	23
123.0	55.0	26 48.5	115 42.5	BD	61 07 28	1156	139	483	2.88	100.0	21	29
123.0	60.0	26 38.5	116 09.0	BD	61 07 28	1451	141	487	2.89	100.0	18	22
123.0	65.0	26 28.5	116 28.0	BD	61 07 28	1721	140	475	2.95	100.0	27	10
123.0	70.0	26 19.0	116 47.0	BD	61 07 28	1946	135	497	2.71	100.0	30	3
123.0	80.0	25 59.0	117 25.5	BD	61 07 29	0036	134	486	2.76	100.0	657	25
127.0	34.0	26 55.0	114 06.5	BD	61 07 30	0658	52	229	2.28	100.0	3	77
127.0	40.0	26 43.0	114 23.2	BD	61 07 30	0426	139	509	2.73	100.0	81	2
127.0	45.0	26 33.0	114 46.0	BD	61 07 30	0146	142	498	2.86	100.0	11	4
127.0	50.0	26 23.0	115 08.0	BD	61 07 29	2301	140	484	2.89	100.0	30	3
127.0	55.0	26 09.0	115 27.0	BD	61 07 29	1811	130	504	2.59	100.0	19	13
127.0	60.0	26 01.0	115 47.0	BD	61 07 29	1531	137	491	2.79	100.0	27	9
127.0	65.0	25 53.0	116 08.0	BD	61 07 29	1251	128	523	2.44	100.0	21	15
127.0	70.0	25 44.0	116 26.0	BD	61 07 29	1011	137	493	2.79	100.0	11	25
127.0	80.0	25 24.0	117 02.5	BD	61 07 29	0526	140	482	2.90	100.0	25	101
130.0	30.0	26 27.8	113 28.8	HO	61 07 27	0258	69	237	2.90	100.0	14	59
130.0	35.0	26 14.0	113 49.8	HO	61 07 26	2246	122	562	2.17	100.0	3	59
130.0	40.0	26 05.6	114 04.4	HO	61 07 26	2041	145	478	3.03	100.0	10	0
130.0	45.0	25 56.7	114 25.4	HO	61 07 26	1731	150	457	3.27	100.0	22	0
130.0	50.0	25 46.0	114 44.0	HO	61 07 26	1526	138	475	2.90	100.0	9	8
130.0	55.0	25 34.1	115 02.8	HO	61 07 26	1156	153	450	3.40	100.0	5	18
130.0	60.0	25 24.0	115 20.5	HO	61 07 26	0936	134	476	2.81	100.0	19	23
130.0	70.0	25 04.8	115 58.0	HO	61 07 26	0416	154	439	3.50	100.0	47	19
130.0	80.0	24 47.6	116 38.2	HO	61 07 25	2246	135	498	2.71	100.0	700	16
130.0	90.0	24 29.8	117 17.9	HO	61 07 25	1726	122	515	2.38	100.0	10	13
130.0	100.0	24 11.1	117 53.0	HO	61 07 25	1156	119	511	2.34	100.0	13	8
130.0	120.0	23 29.3	119 09.9	HO	61 07 25	0236	134	469	2.85	100.0	208	13
133.0	25.0	26 04.5	112 48.0	BD	61 07 30	1623	70	272	2.58	100.0	2	110
133.0	30.0	25 56.0	113 09.5	BD	61 07 30	1846	138	514	2.69	100.0	2	117
133.0	35.0	25 45.5	113 28.0	BD	61 07 30	2121	139	490	2.83	100.0	26	14
133.0	40.0	25 34.0	113 48.0	BD	61 07 30	2351	142	504	2.82	100.0	14	0
133.0	45.0	25 22.0	114 07.8	BD	61 07 31	0221	144	482	2.99	100.0	12	7
133.0	50.0	25 12.5	114 25.0	BD	61 07 31	0456	134	519	2.58	100.0	23	7

TABLE 1. (cont.)

## CalCOFI Cruise 6107

Line	Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
133.0	55.0	25 04.5	114 43.0	BD	61 07 31	0711	136	504	2.70	100.0	27	2
133.0	60.0	24 54.5	115 02.0	BD	61 07 31	0941	136	516	2.64	100.0	30	6
133.0	65.0	24 44.5	115 20.5	BD	61 07 31	1210	140	527	2.65	100.0	19	10
133.0	70.0	24 34.5	115 39.0	BD	61 07 31	1451	139	504	2.76	100.0	15	10
133.0	80.0	24 14.5	116 17.0	BD	61 07 31	1851	140	514	2.72	100.0	307	67
137.0	23.0	25 33.4	112 18.5	HO	61 07 27	2253	49	224	2.17	100.0	35	160
137.0	30.0	25 19.2	112 42.8	HO	61 07 28	0231	141	474	2.97	100.0	24	11
137.0	35.0	25 09.0	113 00.5	HO	61 07 28	0506	100	584	1.71	100.0	6	6
137.0	40.0	24 58.8	113 17.8	HO	61 07 28	0801	136	477	2.86	100.0	8	4
137.0	45.0	24 49.7	113 35.2	HO	61 07 29	1031	151	464	3.26	100.0	4	0
137.0	50.0	24 39.2	113 54.2	HO	61 07 28	1421	153	433	3.54	100.0	1	6
137.0	55.0	24 29.0	114 14.9	HO	61 07 28	1641	114	546	2.09	100.0	33	3
137.0	60.0	24 19.9	114 36.0	HO	61 07 29	1956	128	488	2.63	100.0	67	9
137.0	70.0	24 00.0	115 18.0	HO	61 07 29	0106	143	454	3.15	100.0	20	1
137.0	80.0	23 40.5	115 59.0	HO	61 07 29	0646	136	499	2.72	100.0	18	0



TABLE 1. (cont.)

## CalCOFI Cruise 6110

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	52.0	37 53.5	123 02.0	HO	61 10 18	1414	224	2.21	100.0	4	166
60.0	55.0	37 47.4	123 15.0	HO	61 10 18	1600	342	1.65	100.0	20	4
60.0	60.0	37 37.0	123 37.0	HO	61 10 18	1841	512	2.71	100.0	22	3
60.0	70.0	37 20.0	124 16.0	HO	61 10 18	2256	598	1.99	100.0	4	7
60.0	80.0	36 57.0	125 04.0	HO	61 10 19	0406	478	3.21	100.0	8	3
60.0	90.0	36 37.0	125 46.0	HO	61 10 19	0831	552	2.32	100.0	3	12
60.0	100.0	36 17.0	126 30.0	HO	61 10 19	1421	503	2.82	100.0	8	28
60.0	120.0	35 36.5	127 56.0	HO	61 10 19	2246	638	1.74	100.0	77	16
60.0	140.0	34 57.0	129 22.2	HO	61 10 20	0701	500	2.87	100.0	27	17
60.0	160.0	34 15.5	130 43.5	HO	61 10 20	1601	527	2.69	100.0	27	11
60.0	180.0	33 35.0	132 11.0	HO	61 10 21	0021	541	2.59	100.0	47	41
60.0	200.0	32 52.0	133 39.0	HO	61 10 21	0901	516	2.73	100.0	14	7
63.0	52.0	37 18.8	122 36.3	HO	61 10 18	0918	262	2.85	100.0	33	265
63.0	55.0	37 12.5	122 50.0	HO	61 10 18	0716	512	2.82	100.0	54	6
63.0	60.0	37 02.6	123 11.5	HO	61 10 18	0346	510	2.89	100.0	18	2
67.0	50.0	36 49.0	122 04.5	HO	61 10 17	1528	179	3.88	100.0	26	4
67.0	55.0	36 39.0	122 26.0	HO	61 10 17	1841	459	3.44	100.0	17	7
67.0	60.0	36 29.0	122 47.5	HO	61 10 17	2211	538	2.65	100.0	13	9
70.0	53.0	36 06.5	121 54.0	HO	61 10 16	1036	522	2.55	100.0	22	3
70.0	55.0	35 58.0	122 12.7	HO	61 10 16	0711	505	2.68	100.0	29	28
70.0	60.0	35 53.5	122 24.0	HO	61 10 16	0326	467	3.09	100.0	25	18
70.0	70.0	35 33.0	123 06.0	HO	61 10 15	2051	142	2.86	100.0	4	22
70.0	80.0	35 12.5	123 48.5	HO	61 10 15	1356	558	2.28	100.0	1	0
70.0	90.0	34 52.0	124 30.0	HO	61 10 14	0726	454	3.34	100.0	3	7
70.0	100.0	34 33.0	125 12.0	HO	61 10 14	2216	559	2.00	100.0	22	28
70.0	120.0	33 59.0	126 25.5	HO	61 10 14	1311	527	2.70	100.0	23	5
70.0	200.0	31 14.0	132 01.0	HO	61 10 21	2221	625	1.81	100.0	48	5
73.0	53.0	35 31.5	121 58.0	HO	61 10 11	2311	544	2.46	100.0	19	4
73.0	60.0	35 17.5	121 28.5	HO	61 10 11	0931	507	2.83	100.0	6	1
77.0	51.0	35 02.0	120 56.5	HO	61 10 12	0946	518	2.85	100.0	10	3
77.0	55.0	34 54.0	121 13.0	HO	61 10 12	0641	553	2.46	100.0	11	0
77.0	57.0	34 49.5	121 21.4	HO	61 10 12	0421	473	3.32	100.0	3	0
80.0	52.0	34 25.0	120 35.0	HO	61 10 12	1451	473	3.04	100.0	28	6
80.0	55.0	34 18.5	120 48.2	HO	61 10 12	1721	470	3.17	100.0	7	5
80.0	60.0	34 08.5	121 10.0	HO	61 10 12	2106	528	2.54	100.0	25	4
80.0	65.0	33 59.0	121 30.0	HO	61 10 12	2316	516	2.60	100.0	28	0
80.0	70.0	33 48.9	121 53.0	HO	61 10 13	0226	482	3.04	100.0	3	0
80.0	80.0	33 30.6	122 35.0	HO	61 10 13	0746	594	1.82	100.0	0	1
80.0	90.0	33 07.7	123 16.0	HO	61 10 13	1301	542	2.57	100.0	17	18
80.0	100.0	32 49.0	123 53.8	HO	61 10 13	1726	527	2.76	100.0	44	23
80.0	120.0	32 14.5	125 08.5	HO	61 10 14	0036	498	2.91	100.0	72	22
80.0	200.0	29 32.0	130 30.0	HO	61 10 22	1316	535	2.57	100.0	13	2
82.0	47.0	34 15.0	119 58.0	BD	61 10 18	1256	534	2.61	100.0	14	4
83.0	40.0	34 14.0	119 24.0	BD	61 10 18	0839	16	1.43	100.0	31	195
83.0	43.0	34 08.0	119 34.0	BD	61 10 18	1011	549	2.26	100.0	34	67

TABLE 1. (cont.)

## CalCOFI Cruise 6110

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.0	51.0	33 52.0	120 08.5	BD	61 10 18	1646	134	510	2.63	100.0	15	29
83.0	55.0	33 44.0	120 24.5	BD	61 10 18	1850	140	471	2.97	100.0	15	13
83.0	60.0	33 34.0	120 45.0	BD	61 10 18	2141	139	457	3.04	100.0	12	4
83.0	65.0	33 24.0	121 06.0	BD	61 10 19	0046	137	485	2.82	100.0	6	8
83.0	70.0	33 14.5	121 26.0	BD	61 10 19	0326	137	472	2.89	100.0	10	6
83.0	80.0	32 54.0	122 08.0	BD	61 10 19	0811	135	477	2.83	100.0	2	4
83.0	90.0	32 34.5	122 47.5	BD	61 10 19	1256	136	513	2.65	100.0	4	8
87.0	35.0	33 50.0	118 37.5	BD	61 10 20	2126	136	500	2.71	100.0	51	2
87.0	40.0	33 40.0	118 58.0	BD	61 10 20	1846	138	475	2.90	100.0	20	2
87.0	45.0	33 30.0	119 19.0	BD	61 10 20	1601	135	476	2.85	100.0	25	2
87.0	50.0	33 20.0	119 39.5	BD	61 10 20	1338	49	220	2.25	100.0	13	0
87.0	55.0	33 10.0	120 00.5	BD	61 10 20	1056	137	472	2.90	100.0	4	1
87.0	60.0	33 02.0	120 22.0	BD	61 10 20	0826	139	494	2.81	100.0	1	0
87.0	65.0	32 57.0	120 39.5	BD	61 10 20	0616	133	493	2.69	100.0	1	7
87.0	70.0	32 45.0	121 01.0	BD	61 10 20	0331	130	538	2.41	100.0	6	2
87.0	80.0	32 21.6	121 43.0	BD	61 10 19	2226	137	500	2.73	100.0	4	8
87.0	90.0	31 59.0	122 24.0	BD	61 10 19	1731	134	487	2.75	100.0	5	5
90.0	28.0	33 25.3	117 43.2	HO	61 10 26	1216	125	552	2.27	100.0	5	32
90.0	32.0	33 20.5	118 03.0	HO	61 10 26	0856	121	548	2.20	100.0	10	7
90.0	37.0	33 11.0	118 23.4	HO	61 10 26	0556	110	609	1.80	100.0	5	3
90.0	45.0	32 55.2	118 55.9	HO	61 10 26	0221	134	509	2.63	100.0	4	5
90.0	53.0	32 39.7	119 28.2	HO	61 10 25	2211	105	618	1.70	100.0	4	2
90.0	60.0	32 25.5	119 56.8	HO	61 10 25	1746	135	496	2.73	100.0	1	4
90.0	65.0	32 14.5	120 19.5	HO	61 10 25	1436	132	515	2.56	100.0	7	3
90.0	70.0	32 05.5	120 39.0	HO	61 10 25	1236	131	550	2.38	100.0	2	15
90.0	80.0	31 45.0	121 19.5	HO	61 10 25	0726	134	524	2.56	100.0	2	2
90.0	90.0	31 25.0	122 00.0	HO	61 10 25	0241	130	557	2.34	100.0	6	9
90.0	100.0	31 05.0	122 39.0	HO	61 10 24	2141	121	561	2.15	100.0	29	6
90.0	120.0	30 25.0	124 00.0	HO	61 10 24	1301	153	494	3.10	100.0	14	5
90.0	140.0	29 44.7	125 20.9	HO	61 10 24	0441	145	517	2.80	100.0	25	4
90.0	160.0	29 04.2	126 41.0	HO	61 10 23	1941	148	501	2.95	100.0	49	18
90.0	180.0	28 26.0	128 00.0	HO	61 10 23	1031	136	544	2.49	100.0	10	5
90.0	200.0	27 44.5	129 17.8	HO	61 10 23	0156	138	507	2.73	100.0	28	7
93.0	28.0	32 54.7	117 21.8	BD	61 10 21	0656	131	498	2.63	100.0	8	0
93.0	30.0	32 50.5	117 31.0	BD	61 10 21	0841	134	471	2.84	100.0	3	1
93.0	35.0	32 40.5	117 51.5	BD	61 10 21	1141	131	552	2.37	100.0	2	4
93.0	40.0	32 30.0	118 12.5	BD	61 10 21	1421	130	548	2.36	100.0	2	0
93.0	45.0	32 20.0	118 32.0	BD	61 10 21	1736	131	515	2.55	100.0	11	0
93.0	50.0	32 10.0	118 52.5	BD	61 10 21	2011	140	461	3.04	100.0	6	1
93.0	55.0	31 59.5	119 12.5	BD	61 10 21	2326	144	466	3.08	100.0	3	0
93.0	60.0	31 49.7	119 31.5	BD	61 10 22	0201	136	493	2.75	100.0	2	6
93.0	65.0	31 39.0	119 51.5	BD	61 10 22	0521	142	465	3.06	100.0	6	11
93.0	70.0	31 30.0	120 14.0	BD	61 10 22	0811	145	449	3.22	100.0	4	35
93.0	80.0	31 13.5	120 49.0	BD	61 10 22	1341	138	478	2.89	100.0	1	10
93.0	90.0	30 56.0	121 27.2	BD	61 10 22	1946	145	457	3.18	100.0	9	8

TABLE 1. (cont.)

## CalCOFI Cruise 6110

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
93.0	100.0	30 30.5	122 14.0	BD	61 10 23	0211	139	466	2.99	100.0	55	7
97.0	30.0	32 16.0	117 10.0	BD	61 10 24	1639	37	179	2.08	100.0	50	373
97.0	32.0	32 12.0	117 18.0	BD	61 10 24	1516	137	510	2.68	100.0	5	8
97.0	35.0	32 05.5	117 30.0	BD	61 10 24	1341	123	587	2.10	100.0	0	12
97.0	40.0	31 56.0	117 50.0	BD	61 10 24	1111	139	492	2.83	100.0	5	3
97.0	45.0	31 46.0	118 08.5	BD	61 10 24	0846	140	503	2.79	100.0	1	3
97.0	50.0	31 36.0	118 29.0	BD	61 10 24	0616	131	522	2.51	100.0	3	4
97.0	55.0	31 25.5	118 49.5	BD	61 10 24	0331	139	484	2.86	100.0	13	3
97.0	60.0	31 15.5	119 10.0	BD	61 10 24	0041	135	504	2.68	100.0	14	3
97.0	65.0	31 05.0	119 30.5	BD	61 10 23	2151	141	471	2.99	100.0	43	23
97.0	70.0	30 55.0	119 50.5	BD	61 10 23	1901	142	473	2.99	100.0	20	5
97.0	80.0	30 35.0	120 31.0	BD	61 10 23	1411	139	456	3.04	100.0	11	19
97.0	90.0	30 18.0	121 11.0	BD	61 10 23	0931	142	491	2.89	100.0	15	24
100.0	30.0	31 40.5	116 46.0	HO	61 10 27	2341	129	563	2.30	100.0	13	2
100.0	35.0	31 30.0	117 06.0	HO	61 10 28	0301	146	514	2.83	100.0	7	0
100.0	40.0	31 20.0	117 25.0	HO	61 10 28	0601	149	472	3.16	100.0	1	3
100.0	45.0	31 09.0	117 45.5	HO	61 10 28	0816	132	536	2.47	100.0	1	3
100.0	50.0	30 58.5	118 05.0	HO	61 10 28	1151	134	524	2.56	100.0	2	4
100.0	55.0	30 51.5	118 25.0	HO	61 10 28	1441	134	450	2.98	100.0	4	9
100.0	60.0	30 41.0	118 47.0	HO	61 10 28	1836	127	558	2.28	100.0	32	35
100.0	65.0	30 31.0	119 08.0	HO	61 10 28	2146	100	660	1.52	100.0	43	14
100.0	70.0	30 22.0	119 28.0	HO	61 10 29	1156	122	601	2.03	100.0	4	7
100.0	80.0	30 02.0	120 07.0	HO	61 10 29	1646	134	510	2.63	100.0	13	70
100.0	90.0	29 41.0	120 48.5	HO	61 10 29	2141	100	550	1.50	100.0	142	26
100.0	100.0	29 19.3	121 31.0	HO	61 10 30	0301	144	529	2.54	100.0	73	8
100.0	120.0	28 38.6	122 47.5	HO	61 10 30	1106	135	295	2.07	100.0	10	60
103.0	30.0	31 06.0	116 24.5	BD	61 10 26	0418	61	503	2.75	100.0	2	7
103.0	35.0	30 56.0	116 45.0	BD	61 10 26	0651	138	476	2.91	100.0	7	0
103.0	40.0	30 46.0	117 04.5	BD	61 10 26	0911	138	476	2.75	100.0	2	6
103.0	45.0	30 36.0	117 24.0	BD	61 10 26	1151	138	502	2.94	100.0	12	2
103.0	50.0	30 26.0	117 44.5	BD	61 10 26	1446	140	477	3.01	100.0	8	8
103.0	55.0	30 16.0	118 05.0	BD	61 10 26	1746	141	469	3.04	100.0	32	1
103.0	60.0	30 06.0	118 25.0	BD	61 10 26	2026	141	462	2.72	100.0	13	1
103.0	65.0	29 56.5	118 44.0	BD	61 10 26	2311	135	497	2.95	100.0	13	6
103.0	70.0	29 46.5	119 06.0	BD	61 10 27	0156	141	478	2.49	100.0	2	13
103.0	80.0	29 26.5	119 44.0	BD	61 10 27	0636	131	525	2.79	100.0	18	8
103.0	90.0	29 05.5	120 26.0	BD	61 10 27	1216	136	489	2.87	100.0	18	164
107.0	32.0	30 25.8	116 11.0	BD	61 10 29	0201	135	470	2.80	100.0	17	10
107.0	35.0	30 21.5	116 22.5	BD	61 10 29	0001	135	482	2.80	100.0	19	1
107.0	40.0	30 11.0	116 42.0	BD	61 10 28	2111	135	448	3.16	100.0	16	3
107.0	45.0	30 01.5	117 02.0	BD	61 10 28	1811	142	448	2.86	100.0	3	1
107.0	50.0	29 50.5	117 22.0	BD	61 10 28	1521	139	486	2.90	100.0	23	13
107.0	55.0	29 43.5	117 38.0	BD	61 10 28	1251	142	490	2.93	100.0	9	14
107.0	60.0	29 32.0	118 01.5	BD	61 10 28	1006	139	476	2.62	100.0	2	7
107.0	65.0	29 21.0	118 21.0	BD	61 10 28	0720	137	524				

TABLE 1. (cont.)

## CalCOFI Cruise 6110

Line	Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
107.0	70.0	29 11.0	118 41.0	BD	61 10 28	0426	482	141	2.91	100.0	9	6
107.0	80.0	28 51.0	119 22.0	BD	61 10 27	2201	139	472	2.94	100.0	7	13
107.0	90.0	28 35.0	120 02.0	BD	61 10 27	1651	139	490	2.84	100.0	19	15
110.0	33.0	29 50.0	115 52.0	HO	61 11 01	1938	71	245	2.88	100.0	53	94
110.0	35.0	29 44.7	115 59.0	HO	61 11 01	1816	152	432	3.51	100.0	14	27
110.0	40.0	29 35.8	116 19.0	HO	61 11 01	1436	137	510	2.68	100.0	3	7
110.0	45.0	29 27.0	116 38.0	HO	61 11 01	1211	136	497	2.74	100.0	1	192
110.0	50.0	29 12.0	116 59.0	HO	61 11 01	0851	144	487	2.95	100.0	1	2
110.0	55.0	29 02.8	117 26.0	HO	61 11 01	0621	152	478	3.17	100.0	4	0
110.0	60.0	28 55.0	117 39.0	HO	61 11 01	0356	138	539	2.55	100.0	51	1
110.0	65.0	28 46.0	117 59.0	HO	61 11 01	0101	138	507	2.72	100.0	19	0
110.0	70.0	28 36.5	118 18.5	HO	61 10 31	2251	121	582	2.08	100.0	45	23
110.0	80.0	28 19.5	119 00.0	HO	61 10 31	1751	138	510	2.71	100.0	12	166
110.0	90.0	27 57.0	119 36.0	HO	61 10 31	1331	147	495	2.98	100.0	29	46
110.0	100.0	27 36.0	120 16.0	HO	61 10 31	0726	140	507	2.75	100.0	26	11
110.0	120.0	26 58.0	121 30.3	HO	61 10 30	2331	117	582	2.01	100.0	237	16
113.0	30.0	29 22.0	115 18.0	BD	61 10 29	1139	42	162	2.56	100.0	9	299
113.0	35.0	29 11.5	115 38.0	BD	61 10 29	1406	139	478	2.90	100.0	3	7
113.0	40.0	29 02.0	115 57.0	BD	61 10 29	1646	138	470	2.93	100.0	4	7
113.0	45.0	28 52.0	116 18.0	BD	61 10 29	1931	128	512	2.51	100.0	8	0
113.0	50.0	28 41.5	116 36.5	BD	61 10 29	2201	137	472	2.91	100.0	7	7
113.0	55.0	28 35.0	116 55.6	BD	61 10 30	0046	139	468	2.98	100.0	4	2
113.0	60.0	28 25.8	117 15.0	BD	61 10 30	0321	139	476	2.92	100.0	6	1
113.0	65.0	28 17.0	117 35.0	BD	61 10 30	0601	136	456	2.98	100.0	16	0
113.0	70.0	28 02.0	117 55.0	BD	61 10 30	0846	137	472	2.90	100.0	12	26
113.0	80.0	27 42.0	118 33.5	BD	61 10 30	1416	141	482	2.93	100.0	14	28
113.0	90.0	27 22.0	119 12.0	BD	61 10 30	1911	139	490	2.84	100.0	64	27
117.0	26.0	28 56.0	114 41.5	BD	61 11 01	1743	68	245	2.77	100.0	2	155
117.0	30.0	28 48.0	114 56.5	BD	61 11 01	1532	98	325	3.01	100.0	7	671
117.0	35.0	28 38.0	115 16.0	BD	61 11 01	1246	140	483	2.89	100.0	17	152
117.0	40.0	28 28.0	115 35.5	BD	61 11 01	0251	137	451	3.04	100.0	70	41
117.0	45.0	28 18.0	115 56.0	BD	61 11 01	0001	143	454	3.15	100.0	35	9
117.0	50.0	28 08.0	116 15.0	BD	61 10 31	2111	136	521	2.61	100.0	14	4
117.0	55.0	27 58.0	116 34.5	BD	61 10 31	1821	134	514	2.60	100.0	6	9
117.0	60.0	27 45.5	116 54.0	BD	61 10 31	1516	137	498	2.76	100.0	8	0
117.0	65.0	27 35.5	117 13.0	BD	61 10 31	1231	137	498	2.75	100.0	1	0
117.0	70.0	27 27.0	117 31.0	BD	61 10 31	0951	136	501	2.71	100.0	23	27
117.0	80.0	27 11.0	118 12.5	BD	61 10 31	0501	140	490	2.86	100.0	117	11
117.0	90.0	26 48.0	118 50.0	BD	61 10 30	2351	139	483	2.88	100.0	91	19
118.0	39.0	28 18.5	115 23.7	BD	61 11 01	0501	138	448	3.09	100.0	84	23
119.0	33.0	28 18.6	114 53.1	HO	61 11 11	1012	130	319	4.06	100.0	3	613
120.0	25.0	28 22.5	114 15.0	BD	61 11 01	2218	49	232	2.09	100.0	14	355
120.0	30.0	28 13.0	114 34.0	BD	61 11 02	0113	76	330	2.31	100.0	1	360
120.0	35.0	28 03.0	114 54.0	BD	61 11 02	0343	65	304	2.13	100.0	0	313
120.0	40.0	27 56.5	115 14.0	BD	61 11 02	1224	28	166	1.70	100.0	23	149

TABLE 1. (cont.)

## CalCOFI Cruise 6110

Line	Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
120.0	45.0	27 38.5	115 41.5	HO	61 11 02	1926	144	484	2.98	100.0	106	31
120.0	50.0	27 27.0	116 02.5	HO	61 11 02	2326	123	562	2.19	100.0	152	16
120.0	55.0	27 17.5	116 24.0	HO	61 11 03	0146	135	514	2.63	100.0	10	3
120.0	60.0	27 06.0	116 45.5	HO	61 11 03	0406	164	438	3.75	100.0	10	4
120.0	65.0	26 56.0	117 06.5	HO	61 11 03	0706	138	511	2.70	100.0	5	8
120.0	70.0	26 43.0	117 32.0	HO	61 11 03	1001	141	494	2.85	100.0	13	21
120.0	80.0	26 33.0	117 49.3	HO	61 11 03	1326	127	520	2.45	100.0	14	17
120.0	90.0	26 11.0	118 34.0	HO	61 11 03	1751	135	536	2.51	100.0	11	12
120.0	100.0	25 51.0	119 06.1	HO	61 11 03	2216	142	484	2.94	100.0	95	34
120.0	120.0	25 06.2	120 22.4	HO	61 11 04	0611	131	562	2.33	100.0	37	34
123.0	37.0	27 24.0	114 40.0	BD	61 11 02	1723	65	252	2.60	100.0	197	237
123.0	42.0	27 14.0	114 59.0	BD	61 11 02	1941	134	490	2.73	100.0	23	14
123.0	45.0	27 04.5	115 17.8	BD	61 11 02	2201	136	476	2.86	100.0	3	0
123.0	50.0	26 58.0	115 31.0	BD	61 11 02	2201	134	488	2.76	100.0	5	7
123.0	55.0	26 50.5	115 50.0	BD	61 11 03	0226	131	502	2.61	100.0	5	1
123.0	60.0	26 42.5	116 07.8	BD	61 11 03	0506	135	460	2.93	100.0	7	4
123.0	65.0	26 29.5	116 29.5	BD	61 11 03	0806	138	458	3.02	100.0	13	10
123.0	70.0	26 19.0	116 47.0	BD	61 11 03	1041	136	470	2.90	100.0	9	23
123.0	80.0	26 59.0	117 25.5	BD	61 11 03	1551	135	482	2.81	100.0	11	28
127.0	34.0	26 55.0	114 06.5	BD	61 11 04	2258	66	260	2.54	100.0	28	149
127.0	40.0	26 43.5	114 29.0	BD	61 11 04	2011	131	444	2.96	100.0	8	0
127.0	45.0	26 33.0	114 48.5	BD	61 11 04	1701	135	408	3.31	100.0	2	3
127.0	50.0	26 23.0	115 08.0	BD	61 11 04	1411	143	514	2.78	100.0	2	1
127.0	55.0	26 13.5	115 27.0	BD	61 11 04	1131	139	458	3.03	100.0	0	8
127.0	60.0	26 04.0	115 48.0	BD	61 11 04	0806	137	455	3.01	100.0	8	7
127.0	65.0	25 52.0	116 10.0	BD	61 11 04	0441	133	464	2.87	100.0	38	113
127.0	70.0	25 43.0	116 26.2	BD	61 11 04	0146	143	546	2.61	100.0	26	59
127.0	80.0	25 24.0	117 02.5	BD	61 11 03	2036	118	532	2.22	100.0	44	131
130.0	30.0	26 29.3	113 29.6	HO	61 11 06	1513	68	270	2.50	100.0	112	281
130.0	35.0	26 18.5	113 48.3	HO	61 11 06	1256	111	562	1.98	100.0	3	92
130.0	40.0	26 09.2	114 06.5	HO	61 11 06	1021	130	508	2.56	100.0	4	3
130.0	45.0	25 58.0	114 26.5	HO	61 11 06	0646	145	498	2.91	100.0	3	13
130.0	50.0	25 53.0	114 46.4	HO	61 11 06	0421	152	452	3.36	100.0	8	2
130.0	55.0	25 41.9	115 05.0	HO	61 11 05	0126	131	526	2.49	100.0	7	13
130.0	60.0	25 30.5	115 22.4	HO	61 11 05	2256	136	508	2.67	100.0	1	16
130.0	70.0	25 09.0	116 02.0	HO	61 11 05	1826	150	479	3.12	100.0	8	2
130.0	80.0	24 49.2	116 40.0	HO	61 11 05	1311	132	520	2.55	100.0	1	12
130.0	90.0	24 29.0	117 17.5	HO	61 11 05	0741	139	485	2.87	100.0	20	26
130.0	100.0	24 09.5	117 55.0	HO	61 11 05	0301	137	561	2.44	100.0	48	3
130.0	120.0	23 29.0	119 09.5	HO	61 11 04	1841	134	539	2.49	100.0	38	52
133.0	25.0	26 04.5	112 48.0	BD	61 11 05	1348	75	278	2.69	100.0	14	5
133.0	35.0	25 44.5	113 26.5	BD	61 11 05	1851	135	492	2.75	100.0	19	0
133.0	45.0	25 24.0	114 05.0	BD	61 11 06	0001	471	135	2.87	100.0	6	1
133.0	50.0	25 14.5	114 24.0	BD	61 11 06	0231	133	474	2.80	100.0	46	15
133.0	55.0	25 04.5	114 43.0	BD	61 11 06	0511	136	468	2.91	100.0	31	28

TABLE 1. (cont.)

CalCOFI Cruise 6110											
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
133.0	60.0	24 54.5	BD	61 11 06	0741	137	451	3.04	100.0	11	25
133.0	65.0	24 44.5	BD	61 11 06	1006	138	450	3.07	100.0	21	10
133.0	70.0	24 34.5	BD	61 11 06	1236	133	462	2.88	100.0	4	7
137.0	23.0	25 34.9	HO	61 11 07	1446	52	354	1.47	100.0	53	232
137.0	30.0	25 19.0	HO	61 11 07	1726	136	494	2.75	100.0	38	3
137.0	35.0	25 09.3	HO	61 11 07	1941	143	476	3.01	100.0	26	18
137.0	40.0	24 58.5	HO	61 11 07	2226	131	483	2.72	100.0	11	5
137.0	45.0	24 47.0	HO	61 11 08	0051	131	542	2.41	100.0	30	13
137.0	50.0	24 36.9	HO	61 11 08	0336	139	496	2.81	100.0	56	8
137.0	55.0	24 25.0	HO	61 11 08	0541	139	519	2.69	100.0	39	46
137.0	60.0	24 19.5	HO	61 11 08	0801	141	496	2.84	100.0	25	25
137.0	70.0	24 00.0	HO	61 11 08	1326	136	519	2.62	100.0	10	13
137.0	80.0	23 39.0	HO	61 11 08	1801	139	524	2.64	100.0	28	57
140.0	30.0	24 46.0	HO	61 11 09	1643	70	260	2.68	100.0	30	39
140.0	35.0	24 37.0	HO	61 11 09	1421	134	522	2.57	100.0	6	3
140.0	40.0	24 26.5	HO	61 11 09	1156	131	534	2.44	100.0	6	46
140.0	45.0	24 17.7	HO	61 11 09	0856	138	479	2.87	100.0	6	26
140.0	50.0	24 07.6	HO	61 11 09	0641	156	455	3.43	100.0	6	25

TABLE 2. Pooled occurrences of fish larvae taken during CalCOFI cruises in 1961.

Rank	Taxon	Occurrences
1	<i>Engraulis mordax</i>	408
2	<i>Triphoturus mexicanus</i>	407
3	<i>Vinciguerrria lucetia</i>	342
4	<i>Sebastes</i> spp.	311
5	<i>Protomyctophum crockeri</i>	247
6	<i>Cyclothone</i> spp.	214
7	<i>Leuroglossus stilbius</i>	202
8	<i>Citharichthys</i> spp.	186
9	Disintegrated fish larva	184
10	<i>Stenobranchius leucopsarus</i>	177
11	Myctophidae	165
12	<i>Tarletonbeania crenularis</i>	160
13	<i>Lampanyctus ritteri</i>	154
14	<i>Merluccius productus</i>	152
15	<i>Ceratoscopelus townsendi</i>	149
15	<i>Bathylagus wesethi</i>	149
17	<i>Lampanyctus</i> spp.	148
18	Unidentified fish larva	147
19	<i>Trachurus symmetricus</i>	144
20	<i>Melamphaes</i> spp.	117
21	<i>Diogenichthys atlanticus</i>	102
22	<i>Diogenichthys laternatus</i>	94
23	<i>Symbolophorus californiensis</i>	82
24	<i>Diaphus</i> spp.	77
25	Scopelarchidae	67
26	<i>Notoscopelus resplendens</i>	59
27	<i>Stomias atriventer</i>	58
28	<i>Bathylagus ochotensis</i>	57
29	Sternoptychidae	54
29	<i>Diogenichthys</i> spp.	54
31	<i>Lampadena urophaos</i>	53
31	<i>Sardinops sagax</i>	53
33	<i>Citharichthys stigmaeus</i>	50
33	<i>Lestidiops ringens</i>	50
35	<i>Idiacanthus antrostomus</i>	48
36	<i>Myctophum nitidulum</i>	46
37	<i>Tetragonurus cuvieri</i>	45
38	<i>Hygophum reinhardtii</i>	39
39	<i>Icichthys lockingtoni</i>	38
40	<i>Lyopsetta exilis</i>	32
41	Gobiidae	31
42	<i>Notolychnus valdiviae</i>	29
42	<i>Nansenia crassa</i>	29
44	<i>Chauliodus macouni</i>	28
44	Sciaenidae	28
46	Trachipteridae	27
46	<i>Hygophum atratum</i>	27
48	<i>Scomber japonicus</i>	26

TABLE 2. (cont.)

Rank	Taxon	Occurrences
49	Chiasmodontidae	25
50	<i>Hippoglossina stomata</i>	24
51	<i>Oxyjulis californica</i>	23
52	<i>Paralichthys californicus</i>	21
52	<i>Brama</i> spp.	21
54	<i>Gonichthys tenuiculus</i>	20
55	<i>Synodus</i> spp.	19
56	<i>Argentina sialis</i>	18
56	<i>Bathylagus</i> spp.	18
56	<i>Scopelogadus bispinosus</i>	18
56	<i>Symphurus</i> spp.	18
60	<i>Howella brodiei</i>	16
60	Ophidiiformes	16
60	<i>Scopelosaurus</i> spp.	16
63	Ceratioidei	15
64	<i>Parophrys vetulus</i>	14
65	<i>Poromitra</i> spp.	13
65	<i>Lampanyctus regalis</i>	13
67	<i>Halichoeres</i> spp.	12
67	<i>Microstoma microstoma</i>	12
67	Stomiiformes	12
67	<i>Chilara taylori</i>	12
67	Clinidae	12
72	<i>Hypsoblennius</i> spp.	11
72	Cottidae	11
72	<i>Scorpaena</i> spp.	11
72	<i>Cololabis saira</i>	11
76	Serranidae	10
76	<i>Pleuronichthys verticalis</i>	10
76	Trichiuridae	10
76	<i>Prionotus</i> spp.	10
80	<i>Notolepis risso</i>	9
80	<i>Aristostomias scintillans</i>	9
80	<i>Nansenia candida</i>	9
83	Cyclopteridae	8
83	<i>Sebastolobus</i> spp.	8
83	<i>Loweina rara</i>	8
86	Gempylidae	7
86	<i>Sarda chiliensis</i>	7
86	<i>Tactostoma macropus</i>	7
86	Anguilliformes	7
86	<i>Photonectes</i> spp.	7
91	<i>Oxylebius pictus</i>	6
91	<i>Sphyræna argentea</i>	6
91	<i>Syngnathus</i> spp.	6
91	<i>Semicossyphus pulcher</i>	6
95	<i>Girella nigricans</i>	5
95	<i>Bathylagus pacificus</i>	5
95	<i>Seriola lalandi</i>	5
95	<i>Bathophilus</i> spp.	5



TABLE 2. (cont.)

Rank	Taxon	Occurrences
95	<i>Diplophos taenia</i>	5
95	<i>Pleuronichthys ritteri</i>	5
101	<i>Etrumeus acuminatus</i>	4
101	<i>Hygophum</i> spp.	4
101	<i>Stemonosudis macrura</i>	4
101	<i>Triphoturus nigrescens</i>	4
101	<i>Scopeloberyx robustus</i>	4
101	<i>Medialuna californiensis</i>	4
101	Macrouridae	4
101	<i>Caulolatilus princeps</i>	4
101	<i>Ichthyococcus</i> spp.	4
101	<i>Pleuronichthys</i> spp.	4
111	<i>Macroramphosus gracilis</i>	3
111	Gobiesocidae	3
111	<i>Electrona rissoi</i>	3
111	<i>Chromis punctipinnis</i>	3
111	<i>Scorpaenichthys marmoratus</i>	3
111	Scombridae	3
111	Agonidae	3
111	<i>Vinciguerrria poweriae</i>	3
119	Exocoetidae	2
119	<i>Centrobranchus</i> spp.	2
119	<i>Pleuronichthys coenosus</i>	2
119	<i>Ophidion scrippsae</i>	2
119	<i>Glyptocephalus zachirus</i>	2
119	Gonostomatidae	2
119	<i>Sudis atrox</i>	2
119	<i>Peprilus simillimus</i>	2
119	Pleuronectiformes	2
119	<i>Microstomus pacificus</i>	2
119	<i>Zaniolepis</i> spp.	2
130	<i>Porichthys</i> spp.	1
130	<i>Psettichthys melanostictus</i>	1
130	<i>Macropinna microstoma</i>	1
130	Evermannellidae	1
130	Blennioidei	1
130	<i>Scomberomorus</i> spp.	1
130	<i>Lepidopsetta bilineata</i>	1
130	<i>Xystreurys liolepis</i>	1
130	<i>Icosteus aenigmaticus</i>	1
130	<i>Hypsopsetta guttulata</i>	1
130	<i>Pleuronichthys decurrens</i>	1
130	<i>Eustomias</i> spp.	1

TABLE 3. Pooled numbers of fish larvae taken during CalCOFI cruises in 1961. Counts are adjusted for percent of sample sorted and standard haul factor (see text).

Rank	Taxon	Count
1	<i>Engraulis mordax</i>	97385
2	<i>Vinciguerrria lucetia</i>	19801
3	<i>Triphoturus mexicanus</i>	10892
4	<i>Sebastes</i> spp.	9142
5	<i>Leuroglossus stilbius</i>	8129
6	<i>Merluccius productus</i>	7017
7	<i>Stenobranchius leucopsarus</i>	5022
8	<i>Citharichthys</i> spp.	3362
9	<i>Trachurus symmetricus</i>	2953
10	<i>Ceratospelus townsendi</i>	2620
11	<i>Cyclothone</i> spp.	2254
12	<i>Sardinops sagax</i>	1933
13	<i>Tarletonbeania crenularis</i>	1709
14	<i>Diogenichthys laternatus</i>	1292
15	Myctophidae	1228
16	<i>Protomyctophum crockeri</i>	1189
17	<i>Bathylagus wesethi</i>	1133
18	<i>Lampanyctus ritteri</i>	1106
19	<i>Lampanyctus</i> spp.	879
19	Unidentified fish larva	879
21	Disintegrated fish larva	857
22	<i>Diogenichthys atlanticus</i>	753
23	<i>Diaphus</i> spp.	681
24	<i>Melamphaes</i> spp.	594
25	<i>Symbolophorus californiensis</i>	487
26	<i>Diogenichthys</i> spp.	452
27	<i>Notoscopelus resplendens</i>	363
28	<i>Idiacanthus antrostomus</i>	360
29	<i>Lampadena urophaos</i>	319
30	<i>Bathylagus ochotensis</i>	307
31	Scopelarchidae	289
32	<i>Citharichthys stigmaeus</i>	252
33	Sciaenidae	243
34	<i>Synodus</i> spp.	232
35	<i>Stomias atriventer</i>	216
36	Sternoptychidae	209
37	<i>Tetragonurus cuvieri</i>	200
38	<i>Hygophum reinhardtii</i>	190
39	<i>Oxyjulis californica</i>	185
40	<i>Lestidiops ringens</i>	177
41	<i>Lyopsetta exilis</i>	176
42	<i>Scomber japonicus</i>	162
43	<i>Icichthys lockingtoni</i>	157
44	<i>Myctophum nitidulum</i>	156
45	<i>Notolychnus valdiviae</i>	141
46	<i>Nansenia candida</i>	111
47	<i>Prionotus</i> spp.	108

TABLE 3. (cont.)

Rank	Taxon	Count
48	<i>Hygophum atratum</i>	103
49	<i>Argentina sialis</i>	99
50	<i>Nansenia crassa</i>	96
51	<i>Bathylagus</i> spp.	95
52	<i>Chauliodus macouni</i>	93
53	<i>Hippoglossina stomata</i>	86
53	<i>Paralichthys californicus</i>	86
55	<i>Sarda chiliensis</i>	85
56	Gobiidae	83
57	<i>Symphurus</i> spp.	82
58	Trachipteridae	79
59	Ophidiiformes	78
60	Chiasmodontidae	76
61	Trichiuridae	72
62	<i>Tactostoma macropus</i>	71
63	<i>Gonichthys tenuiculus</i>	69
64	<i>Brama</i> spp.	68
65	<i>Scorpaena</i> spp.	66
66	<i>Howella brodiei</i>	65
67	<i>Scopelosaurus</i> spp.	64
68	Cottidae	60
69	<i>Etrumeus acuminatus</i>	59
70	<i>Scopelogadus bispinosus</i>	57
71	<i>Halichoeres</i> spp.	56
72	Serranidae	54
72	<i>Sphyræna argentea</i>	54
74	Ceratioidei	52
75	<i>Lampanyctus regalis</i>	49
75	<i>Poromitra</i> spp.	49
77	<i>Parophrys vetulus</i>	48
78	<i>Hypsoblennius</i> spp.	46
79	<i>Cololabis saira</i>	42
80	Clinidae	41
81	Cyclopteridae	39
82	<i>Bathylagus pacificus</i>	38
82	<i>Photonectes</i> spp.	38
84	<i>Syngnathus</i> spp.	36
84	<i>Chilara taylori</i>	36
84	<i>Aristostomias scintillans</i>	36
87	<i>Microstoma microstoma</i>	34
87	<i>Notolepis risso</i>	34
87	Stomiiformes	34
90	<i>Pleuronichthys verticalis</i>	32
91	<i>Sebastolobus</i> spp.	28
92	<i>Bathophilus</i> spp.	24
92	<i>Loweina rara</i>	24
94	Anguilliformes	21
94	<i>Semicossyphus pulcher</i>	21
94	<i>Hygophum</i> spp.	21

TABLE 3. (cont.)

Rank	Taxon	Count
97	<i>Seriola lalandi</i>	20
97	Gempylidae	20
97	<i>Medialuna californiensis</i>	20
100	<i>Triphoturus nigrescens</i>	16
100	<i>Scopeloberyx robustus</i>	16
100	<i>Scorpaenichthys marmoratus</i>	16
103	<i>Oxylebius pictus</i>	15
103	<i>Diplophos taenia</i>	15
103	<i>Caulolatilus princeps</i>	15
106	<i>Girella nigricans</i>	14
107	<i>Pleuronichthys ritteri</i>	13
107	<i>Stemonosudis macrura</i>	13
109	Macrouridae	12
109	Scombridae	12
109	<i>Ichthyococcus</i> spp.	12
112	<i>Pleuronichthys</i> spp.	11
112	<i>Ophidion scrippsae</i>	11
112	<i>Chromis punctipinnis</i>	11
112	<i>Electrona rissoi</i>	11
112	Agonidae	11
117	<i>Vinciguerrria poweriae</i>	9
117	<i>Macroramphosus gracilis</i>	9
119	<i>Scomberomorus</i> spp.	8
120	Gonostomatidae	7
120	Gobiesocidae	7
122	<i>Sudis atrox</i>	6
122	<i>Pleuronichthys coenosus</i>	6
122	<i>Zaniolepis</i> spp.	6
122	<i>Glyptocephalus zachirus</i>	6
122	<i>Peprilus simillimus</i>	6
122	<i>Centrobranchus</i> spp.	6
122	<i>Microstomus pacificus</i>	6
122	Exocoetidae	6
130	Pleuronectiformes	4
131	<i>Eustomias</i> spp.	3
131	Evermannellidae	3
131	<i>Xystreurys liolepis</i>	3
131	<i>Hypsopsetta guttulata</i>	3
131	<i>Pleuronichthys decurrens</i>	3
136	<i>Psettichthys melanostictus</i>	2
136	<i>Icosteus aenigmaticus</i>	2
136	Blennioidei	2
136	<i>Porichthys</i> spp.	2
136	<i>Macropinna microstoma</i>	2
136	<i>Lepidopsetta bilineata</i>	2
	Total	191484

TABLE 4. Numbers of fish larvae taken on stations occupied during CalCOFI cruises in 1961. Counts are adjusted for percent of sample sorted and standard haul factor (see text). Average number is given for stations occupied twice during a single month. Unoccupied stations are indicated by a dash.

Anguilliformes												
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0 45.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
87.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
127.0 40.0	-	3.2	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0 80.0	-	-	-	-	0.0	-	2.9	-	-	-	0.0	-
133.0 35.0	-	3.3	-	-	0.0	-	0.0	-	-	-	2.8	-
133.0 50.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
Etrumeus acuminatus												
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	6.0	-
123.0 37.0	-	0.0	-	-	0.0	-	0.0	-	-	-	13.0	-
127.0 34.0	-	0.0	-	-	0.0	-	0.0	-	-	-	20.3	-
130.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	20.0	-
Sardinops sagax												
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
82.0 47.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0 40.0	-	0.0	-	0.0	-	-	0.0	-	-	34.3	-	-
83.0 43.0	-	0.0	-	9.7	-	-	0.0	-	-	11.3	-	-
83.0 51.0	-	9.9	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 35.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
87.0 50.0	-	58.0	-	0.0	-	-	2.0	-	-	0.0	-	-
87.0 55.0	-	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	21.4	-	-	0.0	-	-
90.0 37.0	0.0	-	-	11.1	-	-	0.0	-	-	0.0	-	-
93.0 50.0	-	0.0	-	10.7	-	-	0.0	-	-	0.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
93.0 65.0	-	0.0	-	23.4	-	-	-	-	-	0.0	-	-
93.0 70.0	-	0.0	-	11.0	-	-	-	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	30.9	-	-	0.0	-	-
97.0 32.0	-	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
97.0 50.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0 50.0	-	0.0	-	5.5	-	-	0.0	-	-	0.0	-	-
100.0 55.0	0.0	-	-	17.9	-	-	0.0	-	-	0.0	-	-
100.0 60.0	0.0	-	-	0.0	-	-	12.1	-	-	0.0	-	-
107.0 32.0	-	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0 35.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
113.0 30.0	-	0.0	-	-	0.0	-	-	-	-	-	-	-
115.0 35.0	-	0.0	-	-	0.0	-	4.4	-	-	-	-	-

TABLE 4. (cont.)

*Sardinops sagax* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0	26.0	0.0	-	-	0.0	-	7.8	-	-	-	0.0	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	21.3	-
118.0	39.0	3.1	-	-	0.0	-	0.0	-	-	-	6.2	-
120.0	25.0	2.2	-	-	0.0	-	2.2	-	-	-	2.1	-
120.0	30.0	0.0	-	-	0.0	-	156.6	-	-	-	0.0	-
120.0	35.0	0.0	-	-	0.0	-	166.8	-	-	-	0.0	-
120.0	40.0	0.0	-	-	100.8	-	18.7	-	-	-	18.7	-
120.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	175.8	-
120.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	46.0	-
123.0	37.0	113.2	-	-	0.0	-	2.8	-	-	-	403.0	-
123.0	42.0	26.3	-	-	3.0	-	0.0	-	-	-	32.8	-
127.0	34.0	0.0	-	-	0.0	-	0.0	-	-	-	5.1	-
130.0	30.0	0.0	-	-	0.0	-	0.0	-	-	-	107.5	-
133.0	25.0	-	-	-	0.0	-	0.0	-	-	-	10.8	-
133.0	35.0	6.5	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0	23.0	0.0	-	-	0.0	-	56.4	-	-	-	2.9	-
140.0	30.0	-	-	-	0.0	-	-	-	-	-	13.4	-

*Engraulis mordax*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	70.0	0.0	-	0.0	-	-	69.6	-	-	0.0	-	-
63.0	52.0	3.6	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	60.0	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
67.0	50.0	0.0	-	0.0	-	-	0.0	-	-	7.8	-	-
67.0	55.0	2.2	-	0.0	-	-	21.9	-	-	10.3	-	-
67.0	60.0	0.0	-	0.0	-	-	304.1	-	-	0.0	-	-
70.0	53.0	0.0	-	0.0	-	-	54.0	-	-	0.0	-	-
70.0	60.0	0.0	-	0.0	-	-	129.7	-	-	8.0	-	-
70.0	70.0	0.0	-	0.0	-	-	667.8	-	-	34.0	-	-
70.0	100.0	0.0	-	0.0	-	-	120.6	-	-	8.6	-	-
73.0	53.0	0.0	-	0.0	-	9.7	0.0	-	-	2.0	-	-
73.0	60.0	0.0	-	13.0	-	369.4	-	-	-	7.4	-	-
77.0	51.0	6.7	-	7.4	-	3.6	-	-	-	0.0	-	-
77.0	55.0	0.0	-	3.4	-	17.8	-	-	-	2.8	-	-
77.0	57.0	0.0	-	33.9	-	102.4	-	-	-	12.3	-	-
80.0	52.0	11.8	-	203.2	-	37.7	-	-	-	0.0	-	-
80.0	55.0	23.5	-	594.3	-	52.5	-	-	-	15.2	-	-
80.0	60.0	0.0	-	175.6	-	1023.7	-	-	-	0.0	-	-
80.0	65.0	0.0	-	54.9	-	284.3	-	-	-	12.7	-	-
80.0	70.0	0.0	-	278.2	-	334.0	-	-	-	20.8	-	-
80.0	80.0	0.0	-	1308.2	-	22.2	-	-	-	0.0	-	-
80.0	90.0	0.0	-	34.2	-	-	0.0	-	-	0.0	-	-
80.0	100.0	0.0	-	97.7	-	-	3.7	-	-	0.0	-	-

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	120.0	0.0	-	10.9	-	-	0.0	-	-	0.0	-	-
82.0	47.0	0.0	-	0.0	-	-	5.6	-	-	5.2	-	-
83.0	40.0	0.0	-	117.5	-	-	30.8	-	-	1.4	-	-
83.0	43.0	7.6	-	75.0	-	-	8.8	-	-	0.0	-	-
83.0	51.0	0.0	-	14.5	-	-	531.9	-	-	7.9	-	-
83.0	55.0	0.0	-	84.0	-	-	50.2	-	-	17.8	-	-
83.0	60.0	0.0	-	12.4	-	-	825.2	-	-	6.1	-	-
83.0	65.0	0.0	-	26.8	-	-	2534.4	-	-	5.6	-	-
83.0	70.0	0.0	-	177.8	-	-	1009.2	-	-	2.9	-	-
83.0	80.0	0.0	-	717.9	-	-	198.6	-	-	0.0	-	-
83.0	90.0	-	-	104.8	-	-	0.0	-	-	0.0	-	-
87.0	35.0	0.0	-	202.0	-	-	766.5	-	-	5.4	-	-
87.0	40.0	2.6	-	82.8	-	-	52.0	-	-	2.9	-	-
87.0	45.0	0.0	-	285.0	-	-	0.0	-	-	2.8	-	-
87.0	50.0	0.0	-	152.9	-	-	0.0	-	-	2.3	-	-
87.0	55.0	5.5	-	151.5	-	-	11.5	-	-	0.0	-	-
87.0	60.0	0.0	-	142.5	-	-	176.1	-	-	0.0	-	-
87.0	65.0	0.0	-	85.1	-	-	135.2	-	-	0.0	-	-
87.0	70.0	0.0	-	246.4	-	-	229.3	-	-	4.8	-	-
87.0	80.0	0.0	-	339.0	-	-	0.0	-	-	0.0	-	-
87.0	90.0	-	-	8.6	-	-	0.0	-	-	0.0	-	-
90.0	28.0	-	-	275.3	-	-	128.4	-	-	6.8	-	-
90.0	32.0	2.7	-	213.4	-	-	0.0	-	-	4.4	-	-
90.0	37.0	0.0	-	879.3	-	-	0.0	-	-	0.0	-	-
90.0	45.0	0.0	-	209.2	-	-	0.0	-	-	0.0	-	-
90.0	53.0	0.0	-	183.2	-	-	8.1	-	-	1.7	-	-
90.0	60.0	0.0	-	84.0	-	-	41.9	-	-	0.0	-	-
90.0	65.0	0.0	-	309.5	-	-	82.4	-	-	0.0	-	-
90.0	70.0	0.0	-	252.9	-	-	23.9	-	-	0.0	-	-
90.0	80.0	0.0	-	31.7	-	-	0.0	-	-	0.0	-	-
90.0	90.0	0.0	-	173.6	-	-	0.0	-	-	0.0	-	-
90.0	100.0	0.0	-	1325.3	-	-	0.0	-	-	0.0	-	-
93.0	28.0	119.7	-	97.6	-	-	22.6	-	-	0.0	-	-
93.0	30.0	57.8	-	342.2	-	-	0.0	-	-	5.7	-	-
93.0	35.0	2.6	-	164.4	-	-	0.0	-	-	0.0	-	-
93.0	40.0	11.0	-	564.3	-	-	0.0	-	-	0.0	-	-
93.0	45.0	2.8	-	142.6	-	-	8.3	-	-	12.8	-	-
93.0	50.0	0.0	-	64.3	-	-	127.9	-	-	0.0	-	-
93.0	55.0	0.0	-	46.8	-	-	9.0	-	-	0.0	-	-
93.0	60.0	0.0	-	149.8	-	-	0.0	-	-	0.0	-	-
93.0	65.0	0.0	-	581.1	-	-	-	-	-	0.0	-	-
93.0	70.0	0.0	-	275.3	-	-	-	-	-	0.0	-	-
93.0	80.0	0.0	-	113.9	-	-	6.1	-	-	0.0	-	-
93.0	90.0	0.0	-	0.0	-	-	18.8	-	-	0.0	-	-
97.0	30.0	72.1	-	75.4	-	-	204.3	-	-	14.6	-	-
97.0	32.0	122.4	-	458.2	-	-	8.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0	35.0	39.8	-	597.8	-	-	0.0	-	-	0.0	-	-
97.0	40.0	50.2	-	291.9	-	-	0.0	-	-	2.8	-	-
97.0	45.0	29.0	-	487.4	-	-	0.0	-	-	0.0	-	-
97.0	50.0	64.4	-	290.2	-	-	6.2	-	-	0.0	-	-
97.0	55.0	-	-	91.5	-	-	0.0	-	-	0.0	-	-
97.0	60.0	3.0	-	31.3	-	-	30.1	-	-	0.0	-	-
97.0	65.0	0.0	-	128.1	-	-	23.8	-	-	0.0	-	-
97.0	70.0	0.0	-	18.6	-	-	0.0	-	-	0.0	-	-
97.0	80.0	12.5	-	28.4	-	-	0.0	-	-	0.0	-	-
97.0	90.0	-	-	3.6	-	-	0.0	-	-	0.0	-	-
97.0	90.0	-	-	7.4	-	-	123.4	-	-	9.2	-	-
100.0	30.0	31.6	-	1722.5	-	-	13.7	-	-	2.8	-	-
100.0	35.0	16.3	-	907.1	-	-	0.0	-	-	0.0	-	-
100.0	40.0	9.2	-	89.8	-	-	0.0	-	-	0.0	-	-
100.0	45.0	66.0	-	282.1	-	-	4.4	-	-	0.0	-	-
100.0	50.0	96.0	-	115.5	-	-	0.0	-	-	0.0	-	-
100.0	55.0	9.4	-	5.1	-	-	0.0	-	-	0.0	-	-
100.0	60.0	0.0	-	5.2	-	-	0.0	-	-	0.0	-	-
100.0	65.0	0.0	-	4.4	-	-	0.0	-	-	0.0	-	-
100.0	80.0	0.0	-	76.8	-	-	0.0	-	-	0.0	-	-
100.0	90.0	0.0	-	6.5	-	-	26.6	-	-	4.1	-	-
103.0	30.0	25.3	-	475.0	-	-	8.5	-	-	0.0	-	-
103.0	35.0	126.4	-	31.3	-	-	0.0	-	-	0.0	-	-
103.0	40.0	25.2	-	17.4	-	-	0.0	-	-	0.0	-	-
103.0	45.0	127.1	-	28.7	-	-	0.0	-	-	0.0	-	-
103.0	50.0	0.0	-	5.7	-	-	0.0	-	-	0.0	-	-
103.0	55.0	0.0	-	8.7	-	-	0.0	-	-	3.0	-	-
103.0	60.0	0.0	-	5.6	-	-	0.0	-	-	0.0	-	-
103.0	65.0	0.0	-	143.0	-	-	0.0	-	-	3.0	-	-
103.0	70.0	0.0	-	10.9	-	-	0.0	-	-	0.0	-	-
103.0	80.0	0.0	-	5.5	-	-	0.0	-	-	0.0	-	-
103.0	90.0	-	-	192.7	-	-	46.5	-	-	20.1	-	-
107.0	32.0	316.3	-	6.4	-	-	0.0	-	-	5.6	-	-
107.0	35.0	318.6	-	21.3	-	-	5.0	-	-	0.0	-	-
107.0	40.0	24.4	-	2.7	-	-	0.0	-	-	3.2	-	-
107.0	45.0	0.0	-	17.2	-	-	0.0	-	-	0.0	-	-
107.0	50.0	-	-	23.0	-	-	0.0	-	-	0.0	-	-
107.0	55.0	0.0	-	56.4	-	-	0.0	-	-	0.0	-	-
107.0	60.0	0.0	-	41.1	-	-	0.0	-	-	0.0	-	-
107.0	65.0	0.0	-	29.6	-	-	0.0	-	-	0.0	-	-
107.0	70.0	0.0	-	5.1	-	-	0.0	-	-	0.0	-	-
107.0	80.0	0.0	-	-	-	-	0.0	-	-	0.0	-	-
110.0	33.0	1089.3	-	4.7	-	-	7.6	-	-	17.3	-	-
110.0	35.0	243.0	-	8.0	-	-	6.5	-	-	0.0	-	-
110.0	40.0	5.4	-	224.0	-	-	0.0	-	-	0.0	-	-
110.0	45.0	642.2	-	1804.9	-	-	0.0	-	-	0.0	-	-
110.0	50.0	54.9	-	85.3	-	-	0.0	-	-	0.0	-	-



TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	55.0	9.8	-	-	72.0	-	0.0	-	-	-	0.0	-
110.0	60.0	9.5	-	-	89.3	-	0.0	-	-	-	2.5	-
110.0	65.0	0.0	-	-	14.0	-	0.0	-	-	-	0.0	-
110.0	70.0	0.0	-	-	24.8	-	0.0	-	-	0.0	-	-
110.0	80.0	-	-	-	44.6	-	0.0	-	-	0.0	-	-
113.0	30.0	39.3	-	-	4.6	-	-	-	-	2.6	-	-
113.0	35.0	113.9	-	-	441.7	-	15.6	-	-	2.9	-	-
113.0	40.0	87.2	-	-	69.1	-	0.0	-	-	2.9	-	-
113.0	45.0	52.2	-	-	289.1	-	0.0	-	-	0.0	-	-
113.0	50.0	6.0	-	-	13.0	-	0.0	-	-	0.0	-	-
113.0	55.0	36.1	-	-	21.2	-	0.0	-	-	0.0	-	-
113.0	60.0	51.7	-	-	49.0	-	0.0	-	-	0.0	-	-
113.0	65.0	0.0	-	-	98.7	-	0.0	-	-	0.0	-	-
113.0	70.0	0.0	-	-	7.9	-	0.0	-	-	0.0	-	-
115.0	35.0	436.5	-	-	-	-	6.6	-	-	-	-	-
117.0	26.0	0.0	-	-	6.6	-	7.8	-	-	-	5.5	-
117.0	30.0	2731.5	-	-	7.6	-	14.1	-	-	-	3.0	-
117.0	35.0	426.9	-	-	862.4	-	95.7	-	-	-	0.0	-
117.0	40.0	817.6	-	-	841.0	-	0.0	-	-	-	12.2	-
117.0	45.0	63.6	-	-	53.8	-	0.0	-	-	-	3.2	-
117.0	50.0	0.0	-	-	79.4	-	0.0	-	-	0.0	-	-
117.0	55.0	3.1	-	-	331.2	-	0.0	-	-	0.0	-	-
117.0	60.0	9.0	-	-	46.4	-	0.0	-	-	0.0	-	-
117.0	65.0	6.5	-	-	497.3	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	33.3	-	0.0	-	-	0.0	-	-
117.0	80.0	0.0	-	-	8.0	-	0.0	-	-	0.0	-	-
118.0	39.0	534.6	-	-	75.5	-	0.0	-	-	0.0	27.8	-
119.0	33.0	67.9	-	-	-	-	5.8	-	-	-	4.1	-
120.0	25.0	149.0	-	-	47.7	-	6.5	-	-	-	4.2	-
120.0	30.0	121.0	-	-	31.5	-	14.5	-	-	-	0.0	-
120.0	35.0	109.6	-	-	38.1	-	38.9	-	-	-	0.0	-
120.0	40.0	153.1	-	-	90.7	-	2.3	-	-	-	5.1	-
120.0	45.0	0.0	-	-	5111.6	-	0.0	-	-	-	6.0	-
120.0	50.0	0.0	-	-	812.8	-	0.0	-	-	-	11.0	-
120.0	55.0	11.2	-	-	2039.8	-	0.0	-	-	-	2.6	-
120.0	60.0	0.0	-	-	631.1	-	0.0	-	-	-	0.0	-
120.0	65.0	0.0	-	-	166.3	-	0.0	-	-	-	0.0	-
120.0	70.0	0.0	-	-	36.7	-	0.0	-	-	-	0.0	-
120.0	80.0	0.0	-	-	12.2	-	0.0	-	-	-	0.0	-
120.0	90.0	0.0	-	-	27.8	-	0.0	-	-	-	0.0	-
120.0	100.0	0.0	-	-	9.1	-	0.0	-	-	-	0.0	-
123.0	37.0	2070.0	-	-	2.7	-	0.0	-	-	-	0.0	-
123.0	42.0	1667.3	-	-	144.5	-	0.0	-	-	-	2.6	-
123.0	45.0	51.2	-	-	199.1	-	0.0	-	-	-	10.9	-
123.0	50.0	0.0	-	-	179.6	-	0.0	-	-	-	5.7	-
123.0	55.0	2.8	-	-	77.0	-	0.0	-	-	-	2.8	-

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
123.0	60.0	0.0	-	-	28.7	-	0.0	-	-	-	0.0	-
123.0	65.0	-	-	-	10.6	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	7.6	-	0.0	-	-	-	0.0	-
123.0	80.0	-	-	-	84.0	-	0.0	-	-	-	0.0	-
127.0	34.0	374.4	-	-	283.6	-	0.0	-	-	-	2.5	-
127.0	40.0	1043.3	-	-	1033.7	-	2.7	-	-	-	8.9	-
127.0	45.0	791.3	-	-	126.5	-	0.0	-	-	-	0.0	-
127.0	50.0	200.6	-	-	0.0	-	20.2	-	-	-	0.0	-
127.0	55.0	65.6	-	-	0.0	-	2.6	-	-	-	0.0	-
127.0	60.0	267.8	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	70.0	-	-	-	26.5	-	0.0	-	-	-	0.0	-
127.0	80.0	-	-	-	7.1	-	0.0	-	-	-	0.0	-
130.0	30.0	2251.4	-	-	17.9	-	29.0	-	-	-	25.0	-
130.0	35.0	1620.4	-	-	778.8	-	6.5	-	-	-	2.0	-
130.0	40.0	766.7	-	-	173.0	-	0.0	-	-	-	0.0	-
130.0	45.0	0.0	-	-	6.0	-	3.3	-	-	-	0.0	-
130.0	50.0	0.0	-	-	168.0	-	0.0	-	-	-	0.0	-
130.0	60.0	0.0	-	-	15.6	-	0.0	-	-	-	0.0	-
130.0	70.0	0.0	-	-	24.5	-	0.0	-	-	-	0.0	-
133.0	30.0	4238.6	-	-	0.0	-	0.0	-	-	-	-	-
133.0	35.0	2828.6	-	-	2.9	-	17.0	-	-	-	8.3	-
133.0	40.0	34.1	-	-	116.3	-	8.5	-	-	-	-	-
133.0	45.0	0.0	-	-	632.9	-	0.0	-	-	-	0.0	-
133.0	50.0	0.0	-	-	129.4	-	2.6	-	-	-	0.0	-
133.0	55.0	0.0	-	-	101.9	-	0.0	-	-	-	0.0	-
133.0	60.0	0.0	-	-	11.6	-	0.0	-	-	-	0.0	-
137.0	23.0	2476.0	-	-	25.5	-	4.3	-	-	-	0.0	-
137.0	30.0	11370.1	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	35.0	2151.4	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	40.0	2013.1	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	45.0	197.3	-	-	0.0	-	0.0	-	-	-	2.4	-
137.0	50.0	28.3	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	55.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	70.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	80.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
140.0	30.0	-	-	-	0.0	-	0.0	-	-	-	2.7	-

*Argentina sialis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0	28.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
93.0	30.0	0.0	-	5.8	-	-	0.0	-	-	0.0	-	-
93.0	40.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	32.0	10.2	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0	45.0	0.0	-	-	5.3	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Argentina sialis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 30.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
117.0 35.0	-	3.2	-	-	0.0	-	0.0	-	-	-	2.9	-
117.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	15.2	-
118.0 39.0	-	6.2	-	-	0.0	-	0.0	-	-	-	24.7	-
120.0 45.0	-	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 50.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
120.0 55.0	-	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
123.0 37.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
123.0 60.0	-	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
137.0 30.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-

*Microstoma microstoma*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
60.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
77.0 57.0	0.0	-	-	0.0	-	0.0	-	-	-	3.3	-	-
80.0 55.0	0.0	0.0	-	0.0	-	1.8	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	0.0	-	0.0	-	-	-	3.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
87.0 35.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
97.0 32.0	-	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-

*Nansenia candida*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 80.0	0.0	-	-	6.8	-	-	0.0	-	-	0.0	-	-
60.0 100.0	0.0	-	-	3.8	-	-	0.0	-	-	0.0	-	-
60.0 120.0	0.0	-	-	5.8	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	75.7	-	-	0.0	-	-	0.0	-	-
80.0 100.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	7.3	-	-	0.0	-	-	0.0	-	-
83.0 65.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-

TABLE 4. (cont.)

*Nansenia crassa*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	35.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
110.0	45.0	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0	55.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
113.0	60.0	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	65.0	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
117.0	80.0	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
120.0	60.0	3.2	-	-	2.8	-	0.0	-	-	-	0.0	-
120.0	70.0	0.0	-	-	5.6	-	0.0	-	-	-	0.0	-
120.0	90.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	65.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
127.0	34.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
127.0	40.0	0.0	-	-	5.9	-	0.0	-	-	-	0.0	-
130.0	35.0	0.0	-	-	3.5	-	0.0	-	-	-	0.0	-
130.0	40.0	0.0	-	-	6.0	-	0.0	-	-	-	0.0	-
130.0	45.0	2.4	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	50.0	0.0	-	-	5.4	-	0.0	-	-	-	0.0	-
130.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	35.0	6.5	-	-	3.1	-	0.0	-	-	-	-	-
133.0	40.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
133.0	55.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
133.0	60.0	-	-	-	0.0	-	2.7	-	-	-	-	-
133.0	80.0	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
137.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
137.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
137.0	60.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
137.0	70.0	-	-	-	-	-	-	-	-	-	-	-

*Bathylagus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	200.0	-	-	0.0	-	-	0.0	-	-	5.5	-	-
70.0	53.0	-	-	0.0	-	-	0.0	-	-	2.5	-	-
70.0	70.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
70.0	80.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
70.0	90.0	-	-	0.0	-	-	8.5	-	-	0.0	-	-
70.0	120.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
90.0	32.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	100.0	-	-	0.0	-	-	5.1	-	-	0.0	-	-
90.0	160.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
93.0	90.0	-	-	0.0	-	-	3.1	-	-	0.0	-	-
97.0	70.0	0.0	-	0.0	-	-	12.3	-	-	0.0	-	-
107.0	65.0	0.0	-	0.0	-	-	20.4	-	-	0.0	-	-
107.0	70.0	0.0	-	0.0	-	-	9.4	-	-	0.0	-	-
110.0	45.0	0.0	-	0.0	0.0	-	2.8	-	-	-	0.0	-

TABLE 4. (cont.)

*Bathylagus spp. (cont.)*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	100.0	0.0	-	-	0.0	-	0.0	-	-	2.8	-	-
118.0	39.0	0.0	-	-	0.0	-	0.0	-	-	-	3.1	-
133.0	35.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
140.0	45.0	-	-	-	-	-	-	-	-	-	2.9	-

*Bathylagus ochotensis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0	70.0	-	-	16.9	-	-	0.0	-	-	0.0	-	-
60.0	80.0	-	-	13.6	-	-	0.0	-	-	0.0	-	-
60.0	90.0	-	-	16.3	-	-	0.0	-	-	0.0	-	-
63.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	55.0	-	-	15.1	-	-	3.9	-	-	0.0	-	-
70.0	60.0	-	-	20.9	-	-	0.0	-	-	0.0	-	-
70.0	70.0	-	-	3.3	-	-	3.3	-	-	0.0	-	-
70.0	80.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0	53.0	-	-	0.0	-	1.4	-	-	-	0.0	-	-
77.0	51.0	-	-	1.9	-	0.0	-	-	-	0.0	-	-
77.0	55.0	-	-	11.8	-	0.0	-	-	-	0.0	-	-
77.0	57.0	-	-	7.3	-	0.0	-	-	-	0.0	-	-
80.0	55.0	0.0	-	1.8	-	3.6	-	-	-	0.0	-	-
80.0	65.0	2.5	-	0.0	-	2.2	-	-	-	0.0	-	-
80.0	70.0	0.0	-	0.0	-	6.7	-	-	-	0.0	-	-
80.0	80.0	0.0	-	0.0	-	2.0	-	-	-	0.0	-	-
80.0	90.0	0.0	-	0.0	-	-	2.0	-	-	0.0	-	-
80.0	120.0	0.0	-	3.6	-	-	0.0	-	-	0.0	-	-
83.0	55.0	0.0	-	5.6	-	-	0.0	-	-	0.0	-	-
83.0	60.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
83.0	70.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
83.0	80.0	0.0	-	5.9	-	-	0.0	-	-	0.0	-	-
87.0	45.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0	50.0	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
87.0	70.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
90.0	37.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	53.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	80.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0	100.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
93.0	30.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	35.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	55.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0	60.0	-	-	5.8	-	-	0.0	-	-	0.0	-	-
93.0	65.0	-	-	26.3	-	-	0.0	-	-	0.0	-	-
93.0	80.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Bathylagus ochotensis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0 40.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
97.0 45.0	-	2.6	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0 50.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
97.0 55.0	-	-	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 60.0	-	3.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0 65.0	-	0.0	-	9.1	-	-	0.0	-	-	0.0	-	-
100.0 40.0	0.0	-	-	4.7	-	-	0.0	-	-	0.0	-	-
100.0 45.0	0.0	-	-	1.9	-	-	0.0	-	-	0.0	-	-
100.0 70.0	0.0	-	-	2.6	-	-	0.0	-	-	0.0	-	-
103.0 35.0	-	0.0	-	5.9	-	-	0.0	-	-	0.0	-	-
110.0 45.0	-	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-

*Bathylagus pacificus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 60.0	2.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0 55.0	4.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0 60.0	24.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 53.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0 53.0	0.0	-	-	4.4	-	0.0	-	-	-	0.0	-	-

*Bathylagus wesethi*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	0.0	-	-	3.8	-	-	0.0	-	-	0.0	-	-
60.0 120.0	0.0	-	-	2.9	-	-	34.6	-	-	0.0	-	-
60.0 160.0	0.0	-	-	3.9	-	-	0.0	-	-	0.0	-	-
70.0 80.0	0.0	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0 90.0	0.0	-	-	79.1	-	-	41.1	-	-	0.0	-	-
70.0 100.0	0.0	-	-	32.9	-	-	7.4	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
80.0 90.0	0.0	-	-	6.7	-	-	7.5	-	-	5.1	-	-
80.0 100.0	0.0	-	-	14.6	-	-	8.4	-	-	5.5	-	-
80.0 120.0	0.0	-	-	0.0	-	-	6.0	-	-	2.9	-	-
83.0 60.0	-	0.0	-	0.0	-	-	14.7	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
83.0 90.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 55.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
87.0 60.0	-	0.0	-	6.1	-	-	0.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	5.2	-	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0	70.0	0.0	-	0.0	-	-	13.3	-	-	0.0	-	-
90.0	80.0	0.0	-	0.0	-	-	5.0	-	-	0.0	-	-
90.0	120.0	0.0	-	9.0	-	-	59.0	-	-	0.0	-	-
90.0	140.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
90.0	180.0	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
93.0	45.0	0.0	-	0.0	-	-	5.6	-	-	0.0	-	-
93.0	80.0	0.0	-	0.0	-	-	12.3	-	-	0.0	-	-
93.0	100.0	0.0	-	3.3	-	-	3.0	-	-	0.0	-	-
97.0	35.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0	55.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
97.0	65.0	0.0	-	3.0	-	-	3.0	-	-	0.0	-	-
97.0	90.0	0.0	-	7.2	-	-	0.0	-	-	0.0	-	-
100.0	50.0	0.0	-	0.0	-	-	4.4	-	-	0.0	-	-
100.0	60.0	0.0	-	0.0	-	-	4.4	-	-	0.0	-	-
100.0	65.0	0.0	-	0.0	-	-	7.7	-	-	1.5	-	-
100.0	70.0	0.0	-	2.6	-	-	5.1	-	-	0.0	-	-
100.0	80.0	0.0	-	0.0	-	-	10.1	-	-	2.6	-	-
100.0	90.0	0.0	-	2.3	-	-	0.0	-	-	0.0	-	-
100.0	100.0	0.0	-	3.0	-	-	0.0	-	-	2.6	-	-
103.0	45.0	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
103.0	55.0	0.0	-	0.0	-	-	33.0	-	-	0.0	-	-
103.0	60.0	0.0	-	5.8	-	-	6.0	-	-	0.0	-	-
103.0	65.0	0.0	-	2.8	-	-	6.6	-	-	2.7	-	-
103.0	70.0	2.7	-	2.9	-	-	21.6	-	-	3.0	-	-
103.0	80.0	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0	90.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0	32.0	0.0	-	2.9	-	-	2.0	-	-	0.0	-	-
107.0	35.0	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
107.0	50.0	0.0	-	0.0	-	-	14.3	-	-	0.0	-	-
107.0	55.0	0.0	-	2.9	-	-	14.3	-	-	2.9	-	-
107.0	60.0	0.0	-	5.9	-	-	22.7	-	-	0.0	-	-
107.0	70.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
107.0	80.0	0.0	-	2.6	-	-	0.0	-	-	0.0	-	-
107.0	90.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
110.0	40.0	0.0	-	-	0.0	-	4.0	-	-	-	0.0	-
110.0	45.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
110.0	50.0	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
110.0	55.0	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
110.0	60.0	0.0	-	-	12.8	-	7.4	-	-	-	0.0	-
110.0	65.0	0.0	-	-	2.8	-	21.3	-	-	-	0.0	-
110.0	70.0	0.0	-	-	11.0	-	6.7	-	-	6.2	-	-
110.0	80.0	0.0	-	-	54.9	-	0.0	-	-	0.0	-	-
110.0	90.0	0.0	-	-	28.3	-	0.0	-	-	3.0	-	-
110.0	100.0	0.0	-	-	5.9	-	4.2	-	-	0.0	-	-
113.0	60.0	0.0	-	-	2.6	-	11.2	-	-	0.0	-	-
113.0	65.0	0.0	-	-	0.0	-	8.6	-	-	0.0	-	-

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	70.0	0.0	-	-	2.6	-	9.1	-	-	2.9	-	-
113.0	80.0	0.0	-	-	0.0	-	0.0	-	-	5.9	-	-
113.0	90.0	-	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0	40.0	0.0	-	-	8.7	-	2.9	-	-	-	0.0	-
117.0	45.0	0.0	-	-	0.0	-	5.9	-	-	-	0.0	-
117.0	60.0	3.0	-	-	0.0	-	11.3	-	-	0.0	-	-
117.0	65.0	6.5	-	-	5.9	-	0.0	-	-	0.0	-	-
117.0	70.0	5.8	-	-	10.2	-	0.0	-	-	0.0	-	-
117.0	80.0	2.7	-	-	2.7	-	2.9	-	-	2.9	-	-
117.0	90.0	-	-	-	0.0	-	0.0	-	-	-	-	-
120.0	50.0	0.0	-	-	2.5	-	5.4	-	-	-	2.2	-
120.0	55.0	0.0	-	-	2.1	-	0.0	-	-	-	2.6	-
120.0	60.0	6.3	-	-	0.0	-	10.4	-	-	-	0.0	-
120.0	65.0	5.7	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	70.0	2.8	-	-	14.1	-	5.4	-	-	-	0.0	-
120.0	80.0	0.0	-	-	2.4	-	2.6	-	-	-	0.0	-
120.0	90.0	0.0	-	-	2.3	-	2.8	-	-	-	0.0	-
120.0	100.0	0.0	-	-	0.0	-	4.4	-	-	-	0.0	-
123.0	60.0	0.0	-	-	2.9	-	0.0	-	-	-	17.6	-
123.0	65.0	-	-	-	10.6	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	5.1	-	0.0	-	-	-	0.0	-
123.0	80.0	-	-	-	5.4	-	5.5	-	-	-	2.9	-
127.0	34.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
127.0	55.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
127.0	65.0	-	-	-	0.0	-	0.0	-	-	-	5.7	-
127.0	70.0	-	-	-	0.0	-	0.0	-	-	-	2.6	-
130.0	40.0	0.0	-	-	5.2	-	0.0	-	-	-	0.0	-
133.0	45.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
133.0	50.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	65.0	-	-	-	0.0	-	0.0	-	-	-	6.1	-
137.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-

*Leuroglossus stilbius*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	60.0	2.4	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	52.0	5.4	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	55.0	2.4	-	73.0	-	-	0.0	-	-	0.0	-	-
63.0	60.0	0.0	-	8.0	-	-	5.3	-	-	0.0	-	-
67.0	50.0	0.0	-	16.6	-	-	0.0	-	-	0.0	-	-
67.0	55.0	0.0	-	92.0	-	-	8.2	-	-	3.4	-	-
67.0	60.0	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0	53.0	0.0	-	12.5	-	-	3.0	-	-	0.0	-	-
70.0	55.0	2.3	-	15.1	-	-	0.0	-	-	0.0	-	-
70.0	60.0	3.4	-	56.6	-	-	11.6	-	-	0.0	-	-



TABLE 4. (cont.)

*Leuroglossus stilbius* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0	70.0	0.0	-	26.7	-	-	0.0	-	-	0.0	-	-
73.0	53.0	0.0	-	8.8	-	2.8	-	-	-	2.5	-	-
73.0	60.0	0.0	-	9.8	-	15.1	-	-	-	0.0	-	-
77.0	51.0	0.0	-	63.2	-	0.0	-	-	-	0.0	-	-
77.0	55.0	0.0	-	142.0	-	7.1	-	-	-	0.0	-	-
77.0	57.0	0.0	-	239.6	-	3.5	-	-	-	0.0	-	-
80.0	52.0	0.0	-	86.0	-	50.2	-	-	-	0.0	-	-
80.0	55.0	15.7	-	27.6	-	86.9	-	-	-	0.0	-	-
80.0	60.0	0.0	-	138.3	-	10.4	-	-	-	0.0	-	-
80.0	65.0	0.0	-	54.9	-	2.2	-	-	-	0.0	-	-
80.0	70.0	0.0	-	39.0	-	10.0	-	-	-	0.0	-	-
82.0	47.0	0.0	-	35.0	-	-	0.0	-	-	0.0	-	-
83.0	40.0	4.1	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	43.0	20.3	-	203.3	-	-	0.0	-	-	0.0	-	-
83.0	51.0	0.0	-	6.2	-	-	0.0	-	-	0.0	-	-
83.0	55.0	22.8	-	14.0	-	-	3.0	-	-	0.0	-	-
83.0	60.0	54.6	-	4.9	-	-	12.0	-	-	0.0	-	-
83.0	65.0	1.6	-	220.5	-	-	2.9	-	-	0.0	-	-
83.0	70.0	0.0	-	306.3	-	-	17.4	-	-	2.9	-	-
83.0	80.0	0.0	-	8.8	-	-	2.9	-	-	0.0	-	-
83.0	90.0	-	-	267.7	-	-	0.0	-	-	0.0	-	-
87.0	35.0	31.8	-	21.4	-	-	0.0	-	-	0.0	-	-
87.0	40.0	12.8	-	62.1	-	-	0.0	-	-	0.0	-	-
87.0	45.0	18.6	-	195.0	-	-	0.0	-	-	0.0	-	-
87.0	50.0	0.0	-	41.2	-	-	0.0	-	-	0.0	-	-
87.0	55.0	0.0	-	48.5	-	-	0.0	-	-	0.0	-	-
87.0	60.0	0.0	-	99.8	-	-	0.0	-	-	0.0	-	-
87.0	65.0	0.0	-	48.6	-	-	0.0	-	-	0.0	-	-
87.0	70.0	0.0	-	55.4	-	-	0.0	-	-	0.0	-	-
87.0	80.0	0.0	-	9.8	-	-	0.0	-	-	0.0	-	-
87.0	90.0	-	-	8.6	-	-	0.0	-	-	0.0	-	-
90.0	28.0	-	-	42.2	-	-	0.0	-	-	0.0	-	-
90.0	32.0	8.1	-	154.9	-	-	26.8	-	-	0.0	-	-
90.0	37.0	6.3	-	89.0	-	-	0.0	-	-	0.0	-	-
90.0	45.0	4.4	-	253.2	-	-	0.0	-	-	0.0	-	-
90.0	53.0	2.3	-	29.8	-	-	2.7	-	-	0.0	-	-
90.0	60.0	0.0	-	11.1	-	-	5.2	-	-	0.0	-	-
90.0	65.0	-	-	67.2	-	-	5.3	-	-	0.0	-	-
90.0	70.0	0.0	-	19.7	-	-	0.0	-	-	0.0	-	-
90.0	80.0	0.0	-	11.5	-	-	0.0	-	-	0.0	-	-
90.0	90.0	0.0	-	36.4	-	-	0.0	-	-	0.0	-	-
90.0	100.0	0.0	-	30.7	-	-	0.0	-	-	0.0	-	-
93.0	28.0	10.9	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	30.0	5.5	-	330.6	-	-	0.0	-	-	0.0	-	-
93.0	35.0	135.7	-	101.7	-	-	0.0	-	-	0.0	-	-
93.0	40.0	57.8	-	20.8	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Leuroglossus stilbius* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0	45.0	0.0	-	49.5	-	-	19.5	-	-	0.0	-	-
93.0	50.0	0.0	-	25.0	-	-	9.4	-	-	0.0	-	-
93.0	55.0	0.0	-	23.4	-	-	9.0	-	-	0.0	-	-
93.0	60.0	0.0	-	216.0	-	-	0.0	-	-	0.0	-	-
93.0	65.0	0.0	-	210.2	-	-	-	-	-	0.0	-	-
93.0	70.0	0.0	-	36.7	-	-	-	-	-	0.0	-	-
93.0	80.0	0.0	-	30.1	-	-	0.0	-	-	0.0	-	-
93.0	90.0	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
97.0	30.0	0.0	-	28.6	-	-	0.0	-	-	0.0	-	-
97.0	32.0	0.0	-	148.5	-	-	0.0	-	-	0.0	-	-
97.0	35.0	5.7	-	250.1	-	-	0.0	-	-	0.0	-	-
97.0	40.0	0.0	-	159.0	-	-	3.0	-	-	0.0	-	-
97.0	45.0	5.3	-	242.2	-	-	5.9	-	-	0.0	-	-
97.0	50.0	0.0	-	186.9	-	-	15.4	-	-	0.0	-	-
97.0	55.0	-	-	20.6	-	-	3.1	-	-	0.0	-	-
97.0	60.0	0.0	-	17.1	-	-	3.3	-	-	0.0	-	-
100.0	30.0	0.0	-	20.2	-	-	18.1	-	-	0.0	-	-
100.0	35.0	-	-	143.3	-	-	32.0	-	-	0.0	-	-
100.0	40.0	0.0	-	164.5	-	-	6.5	-	-	0.0	-	-
100.0	45.0	0.0	-	93.6	-	-	10.0	-	-	0.0	-	-
100.0	50.0	0.0	-	80.2	-	-	0.0	-	-	0.0	-	-
100.0	55.0	-	-	79.8	-	-	0.0	-	-	0.0	-	-
100.0	60.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
100.0	70.0	-	-	5.2	-	-	0.0	-	-	0.0	-	-
103.0	35.0	2.3	-	227.2	-	-	8.5	-	-	0.0	-	-
103.0	40.0	0.0	-	18.8	-	-	0.0	-	-	0.0	-	-
103.0	45.0	0.0	-	20.3	-	-	0.0	-	-	0.0	-	-
103.0	50.0	0.0	-	11.5	-	-	3.0	-	-	0.0	-	-
103.0	55.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0	32.0	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0	40.0	0.0	-	6.1	-	-	2.5	-	-	0.0	-	-
107.0	45.0	0.0	-	8.2	-	-	0.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	4.7	-	0.0	-	-	-	0.0	-
110.0	35.0	5.3	-	-	31.9	-	0.0	-	-	-	0.0	-
110.0	40.0	0.0	-	-	10.0	-	0.0	-	-	-	0.0	-
110.0	45.0	15.6	-	-	5.3	-	0.0	-	-	-	0.0	-
110.0	50.0	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
113.0	35.0	0.0	-	-	10.8	-	0.0	-	-	0.0	-	-
113.0	40.0	0.0	-	-	7.7	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	8.9	-	0.0	-	-	0.0	-	-
115.0	35.0	0.0	-	-	-	-	2.2	-	-	-	0.0	-
117.0	30.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
117.0	40.0	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
117.0	55.0	0.0	-	-	5.0	-	2.9	-	-	0.0	-	-
117.0	65.0	0.0	-	-	14.8	-	0.0	-	-	0.0	-	-
118.0	39.0	0.0	-	-	4.7	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Leuroglossus stilbius* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0	45.0	0.0	-	-	15.6	-	2.2	-	-	-	0.0	-
120.0	55.0	0.0	-	-	6.3	-	0.0	-	-	-	0.0	-
120.0	60.0	0.0	-	-	27.8	-	0.0	-	-	-	0.0	-
123.0	37.0	2.8	-	-	5.4	-	0.0	-	-	-	0.0	-
123.0	42.0	8.8	-	-	87.3	-	0.0	-	-	-	0.0	-
123.0	45.0	0.0	-	-	55.0	-	0.0	-	-	-	0.0	-
123.0	50.0	0.0	-	-	32.0	-	0.0	-	-	-	0.0	-
127.0	34.0	0.0	-	-	5.3	-	0.0	-	-	-	0.0	-
127.0	40.0	6.5	-	-	58.4	-	0.0	-	-	-	0.0	-
127.0	45.0	0.0	-	-	12.6	-	0.0	-	-	-	0.0	-
127.0	50.0	0.0	-	-	13.0	-	0.0	-	-	-	0.0	-
130.0	35.0	7.6	-	-	35.4	-	0.0	-	-	-	0.0	-
130.0	40.0	13.5	-	-	15.6	-	0.0	-	-	-	0.0	-
133.0	30.0	2.6	-	-	0.0	-	0.0	-	-	-	-	-
133.0	35.0	9.8	-	-	11.5	-	0.0	-	-	-	0.0	-
133.0	40.0	0.0	-	-	15.3	-	0.0	-	-	-	-	-
133.0	45.0	0.0	-	-	32.2	-	3.0	-	-	-	0.0	-
133.0	50.0	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
133.0	55.0	0.0	-	-	5.8	-	0.0	-	-	-	0.0	-
137.0	30.0	2.6	-	-	2.8	-	0.0	-	-	-	0.0	-
137.0	35.0	8.6	-	-	6.9	-	0.0	-	-	-	0.0	-
137.0	40.0	4.7	-	-	3.0	-	0.0	-	-	-	0.0	-

*Macropinna microstoma*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	200.0	0.0	-	2.3	-	-	0.0	-	-	0.0	-	-

*Stomiiformes*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	90.0	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
60.0	200.0	0.0	-	4.6	-	-	0.0	-	-	0.0	-	-
70.0	120.0	0.0	-	0.0	-	-	1.5	-	-	0.0	-	-
70.0	200.0	0.0	-	0.0	-	-	0.0	-	-	1.8	-	-
80.0	200.0	2.5	-	2.3	-	-	0.0	-	-	0.0	-	-
90.0	180.0	0.0	-	5.3	-	-	0.0	-	-	0.0	-	-
90.0	200.0	0.0	-	2.0	-	-	0.0	-	-	0.0	-	-
97.0	70.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0	50.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
130.0	60.0	0.0	-	0.0	-	-	2.8	-	-	-	-	-
133.0	65.0	-	-	-	0.0	-	2.7	-	-	-	0.0	-

TABLE 4. (cont.)

## Gonostomatidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 180.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
70.0 55.0	0.0	-	-	0.0	-	-	3.9	-	-	0.0	-	-

*Cyclothone* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	49.0	-	-	29.6	-	-
60.0 140.0	0.0	-	-	0.0	-	-	0.0	-	-	14.3	-	-
60.0 160.0	0.0	-	-	3.9	-	-	25.6	-	-	5.4	-	-
60.0 180.0	5.2	-	-	48.8	-	-	72.6	-	-	44.0	-	-
60.0 200.0	2.8	-	-	2.3	-	-	25.1	-	-	13.7	-	-
63.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
70.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
70.0 100.0	0.0	-	-	3.4	-	-	48.6	-	-	2.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	10.8	-	-
70.0 200.0	5.9	-	-	11.0	-	-	27.2	-	-	12.7	-	-
80.0 65.0	0.0	2.5	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 90.0	2.7	-	-	3.8	-	-	3.9	-	-	2.6	-	-
80.0 100.0	9.7	-	-	0.0	-	-	0.0	-	-	19.3	-	-
80.0 120.0	0.0	-	-	10.9	-	-	2.8	-	-	17.5	-	-
80.0 200.0	9.8	-	-	7.0	-	-	16.7	-	-	2.6	-	-
83.0 60.0	-	0.0	-	0.0	-	-	9.0	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	8.8	-	-	0.0	-	-
83.0 70.0	-	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
90.0 53.0	0.0	-	-	0.0	-	-	0.0	-	-	1.7	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 100.0	0.0	-	-	2.8	-	-	0.0	-	-	10.8	-	-
90.0 120.0	0.0	-	-	2.2	-	-	41.3	-	-	6.2	-	-
90.0 140.0	18.8	-	-	0.0	-	-	7.7	-	-	11.2	-	-
90.0 160.0	0.0	-	-	22.5	-	-	47.5	-	-	41.3	-	-
90.0 180.0	0.0	-	-	21.3	-	-	0.0	-	-	5.0	-	-
90.0 200.0	10.3	-	-	10.1	-	-	0.0	-	-	16.4	-	-
93.0 55.0	-	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0 70.0	-	3.0	-	3.7	-	-	-	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
93.0 100.0	-	2.7	-	0.0	-	-	3.0	-	-	14.9	-	-
97.0 50.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0 55.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	5.4	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	26.9	-	-
97.0 70.0	-	0.0	-	0.0	-	-	9.2	-	-	17.9	-	-
97.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 90.0	-	-	-	0.0	-	-	0.0	-	-	5.8	-	-

TABLE 4. (cont.)

*Cyclothone* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	9.1	-	-
100.0 80.0	0.0	-	-	0.0	-	-	4.0	-	-	2.6	-	-
100.0 90.0	2.5	-	-	9.0	-	-	0.0	-	-	46.5	-	-
100.0 100.0	0.0	-	-	5.9	-	-	14.0	-	-	26.2	-	-
100.0 120.0	8.2	-	-	5.1	-	-	22.6	-	-	10.2	-	-
103.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	6.0	-	-	3.0	-	-
103.0 65.0	-	0.0	-	0.0	-	-	6.6	-	-	2.7	-	-
103.0 70.0	-	5.4	-	2.9	-	-	12.4	-	-	0.0	-	-
103.0 80.0	-	8.3	-	0.0	-	-	6.4	-	-	0.0	-	-
103.0 90.0	-	-	-	0.0	-	-	2.9	-	-	2.8	-	-
107.0 55.0	-	2.9	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 60.0	-	2.9	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0 65.0	-	5.8	-	0.0	-	-	11.7	-	-	0.0	-	-
107.0 70.0	-	5.9	-	2.5	-	-	9.4	-	-	2.9	-	-
107.0 80.0	-	5.6	-	2.6	-	-	20.2	-	-	0.0	-	-
107.0 90.0	-	-	-	0.0	-	-	0.0	-	-	5.7	-	-
110.0 40.0	-	2.7	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0 50.0	-	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
110.0 55.0	-	0.0	-	-	17.1	-	9.5	-	-	-	3.2	-
110.0 60.0	-	0.0	-	-	0.0	-	7.4	-	-	-	0.0	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	0.0	-	20.1	-	-	6.2	-	-
110.0 80.0	5.8	-	-	-	27.4	-	6.6	-	-	2.7	-	-
110.0 90.0	3.0	-	-	-	9.4	-	0.0	-	-	8.9	-	-
110.0 100.0	0.0	-	-	-	8.9	-	35.7	-	-	8.3	-	-
110.0 120.0	7.9	-	-	-	10.0	-	32.8	-	-	26.1	-	-
113.0 60.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
113.0 65.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
113.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	2.9	-	-
113.0 80.0	-	0.0	-	-	0.0	-	2.9	-	-	2.9	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	8.5	-	-
117.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
117.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	2.6	-	-
117.0 65.0	-	16.2	-	-	0.0	-	5.6	-	-	0.0	-	-
117.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	2.7	-	-
117.0 80.0	-	0.0	-	-	5.3	-	2.9	-	-	42.9	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	31.7	-	-
120.0 50.0	-	0.0	-	-	0.0	-	10.8	-	-	-	0.0	-
120.0 55.0	-	0.0	-	-	0.0	-	6.1	-	-	-	0.0	-
120.0 60.0	-	3.2	-	-	0.0	-	5.2	-	-	-	0.0	-
120.0 65.0	-	8.5	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 70.0	-	2.8	-	-	0.0	-	8.1	-	-	-	2.8	-
120.0 80.0	-	12.0	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0 90.0	-	5.2	-	-	9.3	-	0.0	-	-	-	0.0	-
120.0 100.0	-	6.0	-	-	2.3	-	11.0	-	-	-	23.5	-

TABLE 4. (cont.)

*Cyclothone* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0	120.0	-	-	-	2.7	-	12.0	-	-	-	7.0	-
123.0	50.0	2.9	-	-	0.0	-	3.0	-	-	-	0.0	-
123.0	55.0	3.1	-	-	0.0	-	5.8	-	-	-	0.0	-
123.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
123.0	60.0	23.2	-	-	0.0	-	55.2	-	-	-	0.0	-
123.0	80.0	-	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	34.0	2.6	-	-	0.0	-	0.0	-	-	-	5.7	-
127.0	65.0	-	-	-	0.0	-	0.0	-	-	-	5.2	-
127.0	70.0	-	-	-	0.0	-	2.8	-	-	-	15.5	-
127.0	80.0	-	-	-	0.0	-	5.8	-	-	-	0.0	-
127.0	80.0	-	-	-	0.0	-	16.4	-	-	-	0.0	-
130.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	55.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0	60.0	0.0	-	-	3.9	-	0.0	-	-	-	0.0	-
130.0	70.0	0.0	-	-	0.0	-	10.5	-	-	-	0.0	-
130.0	80.0	0.0	-	-	2.9	-	24.4	-	-	-	0.0	-
130.0	100.0	8.4	-	-	23.2	-	2.3	-	-	-	14.9	-
130.0	120.0	8.6	-	-	2.8	-	37.0	-	-	-	0.0	-
133.0	50.0	8.4	-	-	0.0	-	0.0	-	-	-	11.6	-
133.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
133.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	3.1	-
133.0	65.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	70.0	-	-	-	0.0	-	2.8	-	-	-	-	-
133.0	80.0	-	-	-	0.0	-	29.9	-	-	-	-	-
133.0	80.0	-	-	-	0.0	-	0.0	-	-	-	5.5	-
137.0	30.0	0.0	-	-	0.0	-	0.0	-	-	-	4.8	-
137.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0	50.0	0.0	-	-	2.8	-	0.0	-	-	-	8.1	-
137.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	60.0	0.0	-	-	0.0	-	7.9	-	-	-	0.0	-
137.0	70.0	0.0	-	-	2.9	-	0.0	-	-	-	7.9	-
137.0	80.0	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
140.0	40.0	-	-	-	-	-	-	-	-	-	-	-

*Diplophos taenia*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	160.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0	200.0	-	-	0.0	-	-	0.0	-	-	1.8	-	-
90.0	200.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
130.0	100.0	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
137.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	5.7	-

*Ichthyococcus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	70.0	-	0.0	-	0.0	-	0.0	-	-	2.9	-	-

TABLE 4. (cont.)

*Ichthyococcus* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 65.0	-	3.2	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.9	-	-
120.0 70.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-

*Vinciguerrria lucetia*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	1.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	17.2	-	-	25.0	-	-	5.2	-	-
60.0 200.0	2.8	-	-	9.2	-	-	8.4	-	-	0.0	-	-
63.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
70.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	16.2	-	-
70.0 200.0	2.9	-	-	11.0	-	-	15.5	-	-	21.7	-	-
80.0 90.0	0.0	-	-	7.6	-	-	0.0	-	-	7.7	-	-
80.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	60.7	-	-
80.0 120.0	0.0	-	-	3.6	-	-	14.1	-	-	90.2	-	-
80.0 200.0	7.4	-	-	9.3	-	-	5.6	-	-	7.7	-	-
83.0 51.0	-	7.4	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	5.9	-	-	5.3	-	-
87.0 70.0	-	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
87.0 80.0	-	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	11.9	-	-	0.0	-	-
90.0 45.0	2.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	8.0	-	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	12.6	-	-	0.0	-	-
90.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	7.0	-	-
90.0 100.0	0.0	-	-	0.0	-	-	12.8	-	-	15.1	-	-
90.0 120.0	0.0	-	-	0.0	-	-	147.5	-	-	12.4	-	-
90.0 140.0	8.0	-	-	2.5	-	-	63.8	-	-	8.4	-	-
90.0 160.0	0.0	-	-	34.6	-	-	20.8	-	-	5.9	-	-
90.0 180.0	14.1	-	-	16.0	-	-	6.2	-	-	0.0	-	-
90.0 200.0	6.2	-	-	30.5	-	-	8.1	-	-	2.7	-	-
93.0 28.0	-	0.0	-	3.7	-	-	0.0	-	-	0.0	-	-
93.0 70.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 80.0	-	0.0	-	9.6	-	-	3.1	-	-	6.4	-	-
93.0 90.0	-	5.5	-	0.0	-	-	24.2	-	-	71.8	-	-
93.0 100.0	-	-	-	0.0	-	-	0.0	-	-	5.7	-	-
97.0 55.0	-	-	-	0.0	-	-	0.0	-	-	8.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	3.0	-	-	41.9	-	-
97.0 65.0	-	0.0	-	0.0	-	-	15.3	-	-	23.9	-	-
97.0 70.0	-	0.0	-	0.0	-	-	15.2	-	-	27.4	-	-
97.0 80.0	-	0.0	-	18.0	-	-	0.0	-	-	20.2	-	-
97.0 90.0	-	-	-	-	-	-	0.0	-	-	-	-	-

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0	60.0	0.0	-	0.0	-	-	4.4	-	-	0.0	-	-
100.0	65.0	2.3	-	0.0	-	-	12.8	-	-	9.1	-	-
100.0	70.0	0.0	-	0.0	-	-	2.6	-	-	0.0	-	-
100.0	80.0	0.0	-	6.7	-	-	0.0	-	-	18.4	-	-
100.0	90.0	5.1	-	18.1	-	-	27.7	-	-	106.5	-	-
100.0	100.0	5.1	-	5.9	-	-	23.3	-	-	65.5	-	-
100.0	120.0	32.9	-	417.4	-	-	173.2	-	-	7.6	-	-
103.0	55.0	-	-	0.0	-	-	36.0	-	-	0.0	-	-
103.0	60.0	5.7	-	2.9	-	-	44.8	-	-	3.0	-	-
103.0	65.0	11.6	-	2.8	-	-	96.3	-	-	0.0	-	-
103.0	70.0	10.7	-	40.0	-	-	154.5	-	-	0.0	-	-
103.0	80.0	2.8	-	2.7	-	-	98.6	-	-	0.0	-	-
103.0	90.0	-	-	13.8	-	-	29.4	-	-	11.2	-	-
107.0	40.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
107.0	50.0	-	-	0.0	-	-	25.6	-	-	0.0	-	-
107.0	55.0	5.7	-	5.8	-	-	17.1	-	-	31.9	-	-
107.0	60.0	0.0	-	41.6	-	-	130.6	-	-	14.7	-	-
107.0	65.0	14.5	-	5.1	-	-	449.7	-	-	0.0	-	-
107.0	70.0	23.7	-	17.3	-	-	282.6	-	-	5.8	-	-
107.0	80.0	11.3	-	5.1	-	-	155.5	-	-	5.9	-	-
107.0	90.0	-	-	16.6	-	-	27.0	-	-	28.4	-	-
110.0	50.0	0.0	-	-	0.0	-	8.2	-	-	-	0.0	-
110.0	55.0	2.5	-	-	157.8	-	9.5	-	-	-	6.3	-
110.0	60.0	0.0	-	-	7.7	-	12.4	-	-	-	22.9	-
110.0	65.0	0.0	-	-	0.0	-	7.8	-	-	-	8.2	-
110.0	70.0	0.0	-	-	134.8	-	70.3	-	-	52.0	-	-
110.0	80.0	-	-	-	843.8	-	36.1	-	-	2.7	-	-
110.0	90.0	-	-	-	141.3	-	9.5	-	-	44.7	-	-
110.0	100.0	21.8	-	-	124.7	-	468.3	-	-	35.8	-	-
110.0	120.0	2.6	-	-	896.4	-	67.9	-	-	371.9	-	-
113.0	30.0	0.0	-	-	2.3	-	-	-	-	0.0	-	-
113.0	50.0	0.0	-	-	5.2	-	0.0	-	-	2.9	-	-
113.0	55.0	0.0	-	-	0.0	-	0.0	-	-	3.0	-	-
113.0	60.0	0.0	-	-	2.6	-	5.6	-	-	8.8	-	-
113.0	65.0	5.8	-	-	0.0	-	14.3	-	-	0.0	-	-
113.0	70.0	8.7	-	-	36.8	-	24.3	-	-	11.6	-	-
113.0	80.0	0.0	-	-	42.1	-	11.5	-	-	23.4	-	-
113.0	90.0	-	-	-	18.3	-	19.4	-	-	79.5	-	-
117.0	40.0	0.0	-	-	5.8	-	0.0	-	-	-	0.0	-
117.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	3.2	-
117.0	60.0	9.0	-	-	0.0	-	11.7	-	-	5.5	-	-
117.0	65.0	29.2	-	-	11.8	-	25.4	-	-	0.0	-	-
117.0	70.0	58.4	-	-	56.3	-	11.0	-	-	27.1	-	-
117.0	80.0	13.6	-	-	222.6	-	5.9	-	-	188.8	-	-
117.0	90.0	-	-	-	27.1	-	3.1	-	-	126.7	-	-
118.0	39.0	0.0	-	-	0.0	-	3.1	-	-	-	3.1	-



TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
119.0	33.0	0.0	-	-	-	-	1.9	-	-	-	0.0	-
120.0	25.0	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-
120.0	45.0	0.0	-	-	0.0	-	6.6	-	-	-	0.0	-
120.0	50.0	0.0	-	-	0.0	-	151.2	-	-	-	0.0	-
120.0	55.0	2.8	-	-	0.0	-	149.5	-	-	-	2.6	-
120.0	60.0	6.3	-	-	0.0	-	67.6	-	-	-	3.8	-
120.0	65.0	45.4	-	-	0.0	-	32.3	-	-	-	0.0	-
120.0	70.0	67.0	-	-	0.0	-	81.3	-	-	-	17.1	-
120.0	80.0	69.2	-	-	0.0	-	89.8	-	-	-	12.3	-
120.0	90.0	39.0	-	-	382.8	-	22.0	-	-	-	10.0	-
120.0	100.0	93.6	-	-	342.0	-	267.2	-	-	-	149.9	-
120.0	120.0	108.4	-	-	153.4	-	57.6	-	-	-	55.9	-
123.0	42.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	45.0	0.0	-	-	0.0	-	6.3	-	-	-	0.0	-
123.0	50.0	3.1	-	-	0.0	-	39.1	-	-	-	0.0	-
123.0	55.0	25.6	-	-	0.0	-	17.3	-	-	-	2.6	-
123.0	60.0	2.9	-	-	8.6	-	11.6	-	-	-	0.0	-
123.0	65.0	-	-	-	2.7	-	14.8	-	-	-	6.0	-
123.0	70.0	-	-	-	7.6	-	24.4	-	-	-	17.4	-
123.0	80.0	-	-	-	0.0	-	1344.1	-	-	-	22.5	-
127.0	40.0	3.2	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	55.0	0.0	-	-	13.8	-	0.0	-	-	-	0.0	-
127.0	60.0	0.0	-	-	17.9	-	2.8	-	-	-	15.1	-
127.0	65.0	-	-	-	10.5	-	2.4	-	-	-	74.6	-
127.0	70.0	-	-	-	5.3	-	2.8	-	-	-	44.4	-
127.0	80.0	-	-	-	33.0	-	29.0	-	-	-	51.1	-
130.0	40.0	13.5	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	45.0	107.3	-	-	39.1	-	9.8	-	-	-	0.0	-
130.0	50.0	0.0	-	-	13.4	-	8.7	-	-	-	13.4	-
130.0	55.0	12.2	-	-	51.1	-	6.8	-	-	-	0.0	-
130.0	60.0	6.9	-	-	132.9	-	16.9	-	-	-	0.0	-
130.0	70.0	160.1	-	-	195.8	-	77.0	-	-	-	0.0	-
130.0	80.0	16.5	-	-	14.5	-	1379.4	-	-	-	2.5	-
130.0	90.0	102.9	-	-	103.5	-	11.9	-	-	-	23.0	-
130.0	100.0	205.1	-	-	327.7	-	21.1	-	-	-	65.9	-
130.0	120.0	464.9	-	-	897.5	-	456.0	-	-	-	49.8	-
133.0	30.0	2.6	-	-	0.0	-	0.0	-	-	-	-	-
133.0	35.0	13.1	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	40.0	12.4	-	-	6.1	-	11.3	-	-	-	-	-
133.0	45.0	0.0	-	-	2.9	-	0.0	-	-	-	5.7	-
133.0	50.0	50.6	-	-	0.0	-	2.6	-	-	-	53.2	-
133.0	55.0	31.3	-	-	0.0	-	13.5	-	-	-	49.5	-
133.0	60.0	6.2	-	-	2.9	-	10.6	-	-	-	9.1	-
133.0	65.0	-	-	-	0.0	-	13.3	-	-	-	6.1	-
133.0	70.0	-	-	-	2.7	-	13.8	-	-	-	2.9	-
133.0	80.0	-	-	-	60.1	-	718.1	-	-	-	-	-

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
137.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	11.0	-
137.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	12.0	-
137.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	45.8	-
137.0 50.0	-	15.4	-	-	0.0	-	0.0	-	-	-	84.3	-
137.0 55.0	-	15.0	-	-	0.0	-	8.4	-	-	-	45.7	-
137.0 60.0	-	4.9	-	-	0.0	-	97.3	-	-	-	22.7	-
137.0 70.0	-	34.3	-	-	5.9	-	28.4	-	-	-	13.1	-
137.0 80.0	-	51.8	-	-	5.8	-	27.2	-	-	-	39.6	-
140.0 40.0	-	-	-	-	-	-	-	-	-	-	7.3	-
140.0 45.0	-	-	-	-	-	-	-	-	-	-	8.6	-
140.0 50.0	-	-	-	-	-	-	-	-	-	-	10.3	-

*Vinciguerria poweriae*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
60.0 180.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0 160.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-

## Sternoptychidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
60.0 200.0	0.0	-	-	4.6	-	-	16.8	-	-	0.0	-	-
70.0 200.0	0.0	-	-	0.0	-	-	27.2	-	-	0.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	5.8	-	-
80.0 200.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	3.0	-	-	3.1	-	-
90.0 140.0	2.7	-	-	5.0	-	-	0.0	-	-	2.8	-	-
90.0 160.0	0.0	-	-	1.7	-	-	3.0	-	-	3.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	8.2	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 120.0	2.7	-	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0 45.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 70.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
110.0 35.0	-	0.0	-	-	5.3	-	0.0	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	4.2	-	-
110.0 80.0	0.0	-	-	-	0.0	-	0.0	-	-	2.7	-	-
110.0 90.0	0.0	-	-	-	3.1	-	0.0	-	-	0.0	-	-
110.0 100.0	0.0	-	-	-	3.0	-	0.0	-	-	0.0	-	-
113.0 45.0	-	0.0	-	-	3.0	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

## Sternoptychidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	70.0	0.0	-	-	0.0	-	0.0	-	-	2.9	-	-
113.0	90.0	-	-	-	0.0	-	0.0	-	-	5.7	-	-
117.0	65.0	3.2	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	0.0	-	0.0	-	-	2.7	-	-
117.0	80.0	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
120.0	45.0	2.9	-	-	5.2	-	0.0	-	-	-	0.0	-
120.0	55.0	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
120.0	90.0	2.6	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	100.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	120.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	65.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	2.5	-	0.0	-	-	-	0.0	-
127.0	40.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
127.0	45.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	55.0	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	45.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	55.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
133.0	45.0	0.0	-	-	0.0	-	3.0	-	-	-	0.0	-
133.0	50.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
133.0	55.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
137.0	35.0	2.9	-	-	0.0	-	0.0	-	-	-	3.0	-
137.0	50.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
137.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-

*Chauliodus macouni*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	70.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
60.0	80.0	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
60.0	140.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
63.0	60.0	0.0	-	0.0	-	-	0.0	-	-	5.8	-	-
67.0	60.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0	53.0	0.0	-	0.0	-	-	0.0	-	-	2.5	-	-
70.0	60.0	3.4	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	80.0	0.0	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0	100.0	0.0	-	0.0	-	-	7.5	-	-	4.0	-	-
73.0	60.0	-	-	0.0	-	0.0	-	-	-	0.0	-	-
77.0	51.0	2.9	-	0.0	-	0.0	-	-	-	2.8	-	-
80.0	65.0	0.0	-	0.0	-	2.2	-	-	-	0.0	-	-
80.0	90.0	0.0	-	0.0	-	-	2.0	-	-	0.0	-	-
83.0	70.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
83.0	80.0	2.8	-	8.8	-	-	0.0	-	-	0.0	-	-
87.0	70.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
90.0	100.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
93.0	35.0	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-

TABLE 4. (cont.)

*Chauliodus macouni* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0 50.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 55.0	-	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
93.0 65.0	-	0.0	-	0.0	-	-	-	-	-	3.1	-	-
97.0 45.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
97.0 50.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
100.0 70.0	0.0	-	-	2.6	-	-	0.0	-	-	0.0	-	-
100.0 80.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-

*Idiacanthus antrostomus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
60.0 120.0	0.0	-	-	0.0	-	-	5.8	-	-	36.5	-	-
60.0 140.0	0.0	-	-	0.0	-	-	5.6	-	-	25.8	-	-
60.0 160.0	0.0	-	-	0.0	-	-	19.9	-	-	8.1	-	-
60.0 180.0	0.0	-	-	0.0	-	-	13.6	-	-	2.6	-	-
60.0 200.0	0.0	-	-	0.0	-	-	8.4	-	-	2.7	-	-
70.0 100.0	0.0	-	-	0.0	-	-	63.6	-	-	2.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	10.4	-	-	2.7	-	-
80.0 100.0	3.9	-	-	0.0	-	-	0.0	-	-	5.5	-	-
80.0 120.0	0.0	-	-	0.0	-	-	8.4	-	-	14.6	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	3.0	-	-	2.8	-	-
90.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.2	-	-
90.0 120.0	2.5	-	-	0.0	-	-	35.4	-	-	0.0	-	-
90.0 180.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0 100.0	-	0.0	-	2.7	-	-	0.0	-	-	3.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
100.0 100.0	0.0	-	-	0.0	-	-	2.3	-	-	2.6	-	-
100.0 120.0	0.0	-	-	0.0	-	-	5.0	-	-	0.0	-	-
103.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
103.0 80.0	-	0.0	-	0.0	-	-	3.2	-	-	0.0	-	-
107.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
113.0 70.0	-	0.0	-	-	0.0	-	3.0	-	-	0.0	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.8	-	-
130.0 100.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
130.0 120.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Idiacanthus antrostomus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
137.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
140.0 45.0	-	-	-	-	-	-	-	-	-	-	2.9	-

*Aristostomias scintillans*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 180.0	0.0	-	-	8.6	-	-	0.0	-	-	0.0	-	-
60.0 200.0	0.0	-	-	2.3	-	-	0.0	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	5.4	-	-
70.0 200.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	3.6	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
90.0 140.0	2.7	-	-	5.0	-	-	0.0	-	-	0.0	-	-
90.0 160.0	0.0	-	-	3.5	-	-	0.0	-	-	0.0	-	-

*Bathophilus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 180.0	0.0	-	-	8.6	-	-	2.3	-	-	0.0	-	-
70.0 200.0	0.0	-	-	2.7	-	-	7.8	-	-	0.0	-	-
80.0 200.0	0.0	-	-	2.3	-	-	0.0	-	-	0.0	-	-

*Eustomias* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-

*Photonectes* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 140.0	0.0	-	-	0.0	-	-	5.6	-	-	0.0	-	-
60.0 200.0	0.0	-	-	9.2	-	-	0.0	-	-	0.0	-	-
70.0 200.0	0.0	-	-	8.2	-	-	0.0	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	3.9	-	-	0.0	-	-
80.0 200.0	0.0	-	-	0.0	-	-	5.6	-	-	0.0	-	-
90.0 160.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 180.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Tactostoma macropus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 90.0	0.0	-	-	0.0	-	-	3.8	-	-	0.0	-	-
60.0 100.0	0.0	-	-	0.0	-	-	3.5	-	-	14.1	-	-
60.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	3.5	-	-
70.0 100.0	0.0	-	-	0.0	-	-	41.1	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0 100.0	0.0	-	-	0.0	-	-	2.6	-	-	0.0	-	-

*Stomias atriventer*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 200.0	0.0	-	-	4.6	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
80.0 55.0	2.6	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 120.0	0.0	-	-	3.6	-	-	0.0	-	-	0.0	-	-
90.0 37.0	2.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
90.0 120.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
90.0 140.0	0.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
93.0 60.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
93.0 65.0	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
100.0 35.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
100.0 100.0	2.6	-	-	0.0	-	-	0.0	-	-	2.6	-	-
103.0 70.0	-	18.8	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0 50.0	-	-	-	0.0	-	-	2.8	-	-	-	0.0	-
110.0 40.0	-	2.7	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0 45.0	-	0.0	-	-	5.3	-	2.8	-	-	-	0.0	-
110.0 55.0	-	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
110.0 60.0	-	0.0	-	-	0.0	-	4.9	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	5.5	-	0.0	-	-	0.0	-	-
110.0 90.0	3.0	-	-	-	0.0	-	0.0	-	-	0.0	-	-
110.0 100.0	0.0	-	-	-	3.0	-	0.0	-	-	0.0	-	-
113.0 40.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0 60.0	-	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0 65.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0 50.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0 70.0	-	2.9	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0 80.0	-	5.4	-	-	0.0	-	0.0	-	-	0.0	-	-
120.0 55.0	-	0.0	-	-	6.3	-	0.0	-	-	0.0	0.0	-
120.0 60.0	-	12.6	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 65.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 80.0	-	3.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0 90.0	-	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0 120.0	-	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 42.0	-	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Stomias atriventer* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
123.0 50.0	-	6.1	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 55.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
123.0 70.0	-	-	-	-	2.5	-	0.0	-	-	-	0.0	-
123.0 80.0	-	-	-	-	2.7	-	0.0	-	-	-	0.0	-
127.0 34.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0 45.0	-	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0 60.0	-	2.9	-	-	2.5	-	2.8	-	-	-	0.0	-
130.0 35.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
130.0 40.0	-	0.0	-	-	3.5	-	0.0	-	-	-	0.0	-
130.0 70.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 100.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
133.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	3.1	-
137.0 50.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.3	-

## Evermannellidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-

*Lestidiops ringens*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	3.9	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	2.0	-	-
70.0 200.0	0.0	-	-	0.0	-	-	7.8	-	-	1.8	-	-
73.0 60.0	0.0	-	-	3.3	-	0.0	-	-	-	0.0	-	-
80.0 65.0	0.0	0.0	-	3.0	-	0.0	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	2.6	-	0.0	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	2.9	-	2.0	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	2.0	-	-	0.0	-	-
83.0 60.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
87.0 65.0	-	3.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
90.0 70.0	0.0	-	-	0.0	-	-	5.3	-	-	0.0	-	-
90.0 90.0	3.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
90.0 160.0	0.0	-	-	1.7	-	-	0.0	-	-	0.0	-	-
93.0 55.0	-	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	3.1	-	-
93.0 70.0	-	0.0	-	0.0	-	-	-	-	-	3.2	-	-

TABLE 4. (cont.)

*Lestidiops ringens* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0 100.0	-	0.0	-	0.0	-	-	0.0	-	-	12.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
100.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 70.0	0.0	-	-	0.0	-	-	2.6	-	-	0.0	-	-
100.0 90.0	0.0	-	-	2.3	-	-	5.5	-	-	0.0	-	-
103.0 55.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
103.0 65.0	-	0.0	-	2.8	-	-	0.0	-	-	5.4	-	-
103.0 70.0	-	0.0	-	0.0	-	-	9.3	-	-	0.0	-	-
103.0 80.0	-	0.0	-	0.0	-	-	3.2	-	-	0.0	-	-
103.0 90.0	-	-	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0 55.0	-	0.0	-	2.9	-	-	2.8	-	-	0.0	-	-
107.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
107.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
110.0 60.0	-	0.0	-	-	0.0	-	7.4	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	0.0	-	3.3	-	-	0.0	-	-
110.0 80.0	2.9	-	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0 50.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
117.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0 70.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0 80.0	-	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
130.0 100.0	-	2.8	-	-	0.0	-	0.0	-	-	-	2.4	-

*Notolepis risso*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
60.0 200.0	2.8	-	-	0.0	-	-	8.4	-	-	0.0	-	-
70.0 200.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
90.0 200.0	2.1	-	-	2.0	-	-	0.0	-	-	0.0	-	-
100.0 35.0	0.0	-	-	0.0	-	-	4.6	-	-	0.0	-	-

*Stemonosudis macrura*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0 100.0	0.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
130.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	5.7	-	-	0.0	-	0.0	-	-	-	2.5	-



TABLE 4. (cont.)

*Sudis atrox*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 180.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-

*Scopelosaurus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	2.9	-	-	0.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
70.0 100.0	0.0	-	-	10.3	-	-	11.2	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	1.5	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	0.0	-	2.0	-	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 180.0	0.0	-	-	5.3	-	-	0.0	-	-	0.0	-	-
93.0 100.0	-	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
100.0 70.0	0.0	-	-	0.0	-	-	2.6	-	-	0.0	-	-
100.0 80.0	0.0	-	-	0.0	-	-	2.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
100.0 100.0	0.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
107.0 90.0	-	-	-	5.5	-	-	0.0	-	-	0.0	-	-

*Scopelarchidae*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 140.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	7.8	-	-	2.9	-	-	0.0	-	-	2.6	-	-
60.0 200.0	0.0	-	-	4.6	-	-	4.2	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
70.0 100.0	0.0	-	-	3.4	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.7	-	-
87.0 45.0	-	2.7	-	0.0	-	-	0.0	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	2.5	-	-
90.0 180.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0 90.0	-	-	-	3.6	-	-	0.0	-	-	0.0	-	-
100.0 55.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0 65.0	0.0	-	-	2.6	-	-	0.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	0.0	-	-	5.5	-	-	0.0	-	-
100.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	2.5	-	-
103.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-

TABLE 4. (cont.)

## Scopelarchidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0	70.0	0.0	-	0.0	-	-	6.2	-	-	0.0	-	-
103.0	80.0	2.8	-	2.7	-	-	0.0	-	-	0.0	-	-
107.0	55.0	0.0	-	2.9	-	-	2.8	-	-	20.3	-	-
107.0	60.0	2.9	-	3.0	-	-	0.0	-	-	0.0	-	-
107.0	65.0	0.0	-	0.0	-	-	5.8	-	-	0.0	-	-
107.0	70.0	3.0	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0	90.0	-	-	0.0	-	-	6.0	-	-	0.0	-	-
110.0	50.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0	65.0	0.0	-	-	5.6	-	0.0	-	-	-	0.0	-
110.0	70.0	0.0	-	-	8.3	-	0.0	-	-	2.1	-	-
110.0	80.0	-	-	-	3.4	-	0.0	-	-	0.0	-	-
110.0	90.0	-	-	-	0.0	-	0.0	-	-	3.0	-	-
110.0	100.0	-	-	-	0.0	-	6.3	-	-	0.0	-	-
110.0	120.0	-	-	-	0.0	-	2.3	-	-	2.0	-	-
113.0	80.0	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
113.0	90.0	-	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0	65.0	3.2	-	-	3.0	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	2.6	-	0.0	-	-	10.8	-	-
117.0	80.0	0.0	-	-	0.0	-	0.0	-	-	8.6	-	-
117.0	90.0	-	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	70.0	5.6	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	80.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	100.0	0.0	-	-	2.3	-	0.0	-	-	-	8.8	-
120.0	120.0	0.0	-	-	0.0	-	4.8	-	-	-	0.0	-
123.0	60.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	65.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0	80.0	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
130.0	90.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
130.0	100.0	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
130.0	120.0	0.0	-	-	16.6	-	5.7	-	-	-	0.0	-
137.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0	80.0	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-

## Myctophidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	70.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
60.0	80.0	-	-	0.0	-	-	0.0	-	-	3.2	-	-
60.0	140.0	0.0	-	2.6	-	-	0.0	-	-	2.9	-	-
60.0	180.0	0.0	-	14.3	-	-	0.0	-	-	0.0	-	-
60.0	200.0	5.6	-	9.2	-	-	0.0	-	-	2.7	-	-
63.0	52.0	5.4	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	55.0	2.4	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0	55.0	0.0	-	4.8	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

## Myctophidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 55.0	4.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 70.0	0.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	11.4	-	-	0.0	-	-
70.0 100.0	0.0	-	-	20.6	-	-	3.7	-	-	0.0	-	-
70.0 120.0	1.4	-	-	9.0	-	-	1.5	-	-	0.0	-	-
70.0 200.0	2.9	-	-	5.5	-	-	38.8	-	-	3.6	-	-
77.0 55.0	0.0	-	-	0.0	-	1.8	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	0.0	-	2.0	-	-	-	0.0	-	-
80.0 90.0	2.7	-	-	0.0	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	7.3	-	-	5.6	-	-	0.0	-	-
80.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	2.6	-	-
83.0 65.0	-	1.6	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
87.0 50.0	-	0.0	-	5.9	-	-	0.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 80.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0 90.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0 120.0	2.5	-	-	6.7	-	-	3.0	-	-	0.0	-	-
90.0 140.0	0.0	-	-	5.0	-	-	2.5	-	-	2.8	-	-
90.0 160.0	0.0	-	-	17.3	-	-	3.0	-	-	11.8	-	-
90.0 200.0	2.1	-	-	34.5	-	-	0.0	-	-	0.0	-	-
93.0 28.0	-	0.0	-	0.0	-	-	11.3	-	-	0.0	-	-
93.0 35.0	-	5.2	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
93.0 100.0	-	0.0	-	6.6	-	-	0.0	-	-	0.0	-	-
97.0 35.0	-	8.5	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0 55.0	-	-	-	3.0	-	-	3.1	-	-	0.0	-	-
97.0 65.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 70.0	-	0.0	-	0.0	-	-	18.4	-	-	3.0	-	-
100.0 45.0	0.0	-	-	0.0	-	-	0.0	-	-	2.5	-	-
100.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	29.6	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	3.0	-	-
100.0 80.0	0.0	-	-	0.0	-	-	4.0	-	-	0.0	-	-
100.0 90.0	2.5	-	-	0.0	-	-	5.5	-	-	0.0	-	-
100.0 120.0	0.0	-	-	2.5	-	-	10.0	-	-	0.0	-	-
103.0 30.0	-	0.0	-	0.0	-	-	5.3	-	-	0.0	-	-
103.0 35.0	-	2.3	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0 55.0	-	0.0	-	0.0	-	-	9.0	-	-	0.0	-	-
103.0 65.0	-	0.0	-	0.0	-	-	13.3	-	-	0.0	-	-
103.0 70.0	-	2.7	-	0.0	-	-	12.4	-	-	0.0	-	-
107.0 40.0	-	0.0	-	0.0	-	-	2.5	-	-	0.0	-	-
107.0 55.0	-	5.7	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0 60.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-

TABLE 4. (cont.)

## Myctophidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0	65.0	0.0	-	0.0	-	-	125.6	-	-	0.0	-	-
107.0	70.0	5.9	-	0.0	-	-	12.6	-	-	0.0	-	-
107.0	80.0	2.8	-	0.0	-	-	11.5	-	-	0.0	-	-
107.0	90.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
110.0	35.0	2.7	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0	50.0	0.0	-	-	6.8	-	0.0	-	-	-	0.0	-
110.0	55.0	0.0	-	-	58.3	-	9.5	-	-	-	0.0	-
110.0	60.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
110.0	80.0	-	-	-	20.6	-	0.0	-	-	0.0	-	-
110.0	90.0	-	-	-	9.4	-	4.8	-	-	0.0	-	-
110.0	100.0	0.0	-	-	3.0	-	0.0	-	-	0.0	-	-
110.0	120.0	-	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	50.0	0.0	-	-	0.0	-	3.2	-	-	0.0	-	-
113.0	65.0	5.8	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	70.0	2.9	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	80.0	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
117.0	35.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
117.0	40.0	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
117.0	45.0	0.0	-	-	0.0	-	14.9	-	-	-	0.0	-
117.0	50.0	0.0	-	-	2.9	-	0.0	-	-	0.0	-	-
117.0	55.0	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	65.0	3.2	-	-	2.5	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
120.0	25.0	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
120.0	45.0	5.8	-	-	0.0	-	8.8	-	-	-	0.0	-
120.0	50.0	2.9	-	-	0.0	-	5.4	-	-	-	0.0	-
120.0	55.0	0.0	-	-	0.0	-	18.2	-	-	-	0.0	-
120.0	100.0	3.0	-	-	0.0	-	19.7	-	-	-	0.0	-
123.0	45.0	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	50.0	3.1	-	-	4.9	-	0.0	-	-	-	0.0	-
123.0	55.0	5.7	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	60.0	0.0	-	-	2.9	-	23.6	-	-	-	0.0	-
123.0	65.0	-	-	-	0.0	-	2.8	-	-	-	0.0	-
123.0	80.0	-	-	-	0.0	-	2.9	-	-	-	0.0	-
127.0	45.0	0.0	-	-	0.0	-	5.8	-	-	-	0.0	-
127.0	50.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
127.0	55.0	0.0	-	-	0.0	-	5.6	-	-	-	2.6	-
127.0	70.0	-	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	80.0	-	-	-	7.1	-	0.0	-	-	-	7.7	-
130.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	45.0	0.0	-	-	3.0	-	3.3	-	-	-	0.0	-
130.0	50.0	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
130.0	60.0	0.0	-	-	3.9	-	0.0	-	-	-	0.0	-
130.0	70.0	0.0	-	-	8.2	-	31.5	-	-	-	0.0	-
130.0	80.0	0.0	-	-	2.9	-	27.1	-	-	-	0.0	-

TABLE 4. (cont.)

## Myctophidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0 90.0	-	0.0	-	-	2.1	-	0.0	-	-	-	2.9	-
130.0 100.0	-	2.8	-	-	0.0	-	0.0	-	-	-	9.8	-
130.0 120.0	-	8.6	-	-	8.3	-	0.0	-	-	-	0.0	-
133.0 30.0	-	5.2	-	-	0.0	-	0.0	-	-	-	-	-
133.0 35.0	-	3.3	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 40.0	-	3.1	-	-	0.0	-	0.0	-	-	-	-	-
133.0 50.0	-	0.0	-	-	5.3	-	0.0	-	-	-	0.0	-
133.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
133.0 60.0	-	0.0	-	-	2.9	-	13.2	-	-	-	0.0	-
133.0 65.0	-	-	-	-	0.0	-	10.6	-	-	-	0.0	-
137.0 35.0	-	8.6	-	-	0.0	-	0.0	-	-	-	3.0	-
137.0 40.0	-	7.1	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0 55.0	-	10.0	-	-	0.0	-	10.4	-	-	-	2.7	-
137.0 60.0	-	12.2	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0 70.0	-	12.3	-	-	0.0	-	3.2	-	-	-	0.0	-
137.0 80.0	-	0.0	-	-	0.0	-	5.4	-	-	-	2.6	-
140.0 50.0	-	-	-	-	-	-	-	-	-	-	3.4	-

## Ceratoscopelus townsendi

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	2.9	-	-	77.8	-	-	43.5	-	-
60.0 140.0	0.0	-	-	0.0	-	-	8.5	-	-	17.2	-	-
60.0 160.0	0.0	-	-	11.7	-	-	31.2	-	-	21.5	-	-
60.0 180.0	5.2	-	-	14.3	-	-	25.0	-	-	33.7	-	-
60.0 200.0	8.5	-	-	25.2	-	-	8.4	-	-	5.5	-	-
63.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
70.0 100.0	0.0	-	-	6.9	-	-	78.5	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	10.8	-	-
70.0 200.0	0.0	-	-	63.0	-	-	38.8	-	-	19.9	-	-
73.0 60.0	0.0	-	-	0.0	-	4.3	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	0.0	-	3.3	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	23.6	-	-	0.0	-	-
80.0 100.0	1.9	-	-	0.0	-	-	0.0	-	-	2.8	-	-
80.0 120.0	0.0	-	-	36.4	-	-	2.8	-	-	29.1	-	-
80.0 200.0	44.3	-	-	9.3	-	-	33.4	-	-	7.7	-	-
83.0 60.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	11.8	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	14.7	-	-	0.0	-	-
87.0 90.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	5.3	-	-	0.0	-	-
90.0 100.0	2.3	-	-	0.0	-	-	2.6	-	-	2.2	-	-
90.0 120.0	0.0	-	-	4.5	-	-	141.6	-	-	12.4	-	-
90.0 140.0	0.0	-	-	5.0	-	-	43.3	-	-	28.0	-	-

TABLE 4. (cont.)

*Ceratoscopelus townsendi* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0	160.0	-	-	15.6	-	-	106.9	-	-	56.0	-	-
90.0	180.0	-	-	18.6	-	-	9.3	-	-	12.4	-	-
90.0	200.0	-	-	28.4	-	-	5.7	-	-	30.0	-	-
93.0	100.0	0.0	-	0.0	-	-	3.0	-	-	12.0	-	-
97.0	60.0	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0	65.0	0.0	-	3.0	-	-	0.0	-	-	6.0	-	-
97.0	70.0	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0	90.0	-	-	0.0	-	-	0.0	-	-	5.8	-	-
100.0	90.0	0.0	-	0.0	-	-	5.5	-	-	22.5	-	-
100.0	100.0	2.6	-	0.0	-	-	21.0	-	-	39.3	-	-
100.0	120.0	8.2	-	20.2	-	-	105.4	-	-	0.0	-	-
103.0	30.0	0.0	-	2.2	-	-	0.0	-	-	0.0	-	-
103.0	60.0	0.0	-	0.0	-	-	14.9	-	-	0.0	-	-
103.0	65.0	2.9	-	0.0	-	-	33.2	-	-	0.0	-	-
103.0	70.0	0.0	-	0.0	-	-	12.4	-	-	0.0	-	-
103.0	80.0	0.0	-	0.0	-	-	25.4	-	-	0.0	-	-
103.0	90.0	-	-	0.0	-	-	0.0	-	-	22.3	-	-
107.0	60.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
107.0	65.0	2.9	-	0.0	-	-	5.8	-	-	0.0	-	-
107.0	70.0	0.0	-	0.0	-	-	18.8	-	-	0.0	-	-
107.0	80.0	0.0	-	0.0	-	-	17.3	-	-	0.0	-	-
107.0	90.0	-	-	2.8	-	-	0.0	-	-	14.2	-	-
110.0	55.0	0.0	-	-	0.0	-	6.4	-	-	-	0.0	-
110.0	60.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
110.0	70.0	0.0	-	-	0.0	-	3.3	-	-	0.0	-	-
110.0	80.0	0.0	-	-	3.4	-	0.0	-	-	0.0	-	-
110.0	90.0	0.0	-	-	0.0	-	4.8	-	-	8.9	-	-
110.0	100.0	0.0	-	-	0.0	-	216.3	-	-	11.0	-	-
110.0	120.0	2.6	-	-	5.0	-	39.8	-	-	50.3	-	-
113.0	60.0	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
113.0	65.0	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
113.0	70.0	0.0	-	-	2.6	-	3.0	-	-	0.0	-	-
113.0	90.0	-	-	-	0.0	-	5.5	-	-	28.4	-	-
117.0	65.0	3.2	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	0.0	-	2.8	-	-	2.7	-	-
117.0	80.0	0.0	-	-	5.3	-	0.0	-	-	31.5	-	-
117.0	90.0	-	-	-	0.0	-	0.0	-	-	25.9	-	-
120.0	50.0	0.0	-	-	0.0	-	21.6	-	-	-	0.0	-
120.0	55.0	0.0	-	-	0.0	-	16.2	-	-	-	0.0	-
120.0	70.0	0.0	-	-	0.0	-	8.1	-	-	-	0.0	-
120.0	80.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	90.0	0.0	-	-	23.2	-	0.0	-	-	-	0.0	-
120.0	100.0	9.1	-	-	9.1	-	21.9	-	-	-	8.8	-
120.0	120.0	0.0	-	-	0.0	-	7.2	-	-	-	9.3	-
123.0	55.0	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
123.0	70.0	-	-	-	0.0	-	8.1	-	-	-	0.0	-

TABLE 4. (cont.)

*Ceratoscopelus townsendi* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
123.0 80.0	-	-	-	-	0.0	-	60.7	-	-	-	0.0	-
127.0 70.0	-	-	-	-	0.0	-	0.0	-	-	-	2.6	-
127.0 80.0	-	-	-	-	0.0	-	2.9	-	-	-	0.0	-
130.0 80.0	-	0.0	-	-	2.9	-	8.1	-	-	-	0.0	-
130.0 100.0	-	11.2	-	-	7.7	-	0.0	-	-	-	4.9	-
130.0 120.0	-	2.9	-	-	74.8	-	2.8	-	-	-	5.0	-
133.0 55.0	-	2.8	-	-	0.0	-	0.0	-	-	-	5.8	-
133.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
133.0 80.0	-	-	-	-	0.0	-	2.7	-	-	-	-	-
137.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0 35.0	-	2.9	-	-	0.0	-	0.0	-	-	-	3.0	-
137.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.6	-

*Diaphus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	0.0	-	-	0.0	-	-	20.9	-	-	0.0	-	-
60.0 80.0	0.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
60.0 100.0	0.0	-	-	7.6	-	-	0.0	-	-	0.0	-	-
60.0 120.0	0.0	-	-	2.9	-	-	11.5	-	-	0.0	-	-
60.0 160.0	0.0	-	-	3.9	-	-	28.4	-	-	5.4	-	-
60.0 180.0	0.0	-	-	0.0	-	-	9.1	-	-	12.9	-	-
60.0 200.0	0.0	-	-	0.0	-	-	12.6	-	-	0.0	-	-
67.0 60.0	0.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
70.0 55.0	0.0	-	-	0.0	-	-	3.9	-	-	0.0	-	-
70.0 60.0	0.0	-	-	0.0	-	-	15.4	-	-	0.0	-	-
70.0 80.0	0.0	-	-	7.2	-	-	3.7	-	-	0.0	-	-
70.0 90.0	0.0	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0 60.0	0.0	-	-	0.0	-	2.2	-	-	-	1.8	-	-
80.0 65.0	0.0	0.0	-	0.0	-	2.2	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	0.0	-	14.1	-	-	-	0.0	-	-
80.0 90.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	47.3	-	-	0.0	-	-
83.0 60.0	-	0.0	-	0.0	-	-	14.9	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	38.9	-	-	0.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	79.1	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	14.6	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	20.6	-	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.6	-	-	0.0	-	-
							23.9	-	-	0.0	-	-

TABLE 4. (cont.)

*Diaphus* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 90.0	0.0	-	-	0.0	-	-	8.3	-	-	0.0	-	-
90.0 100.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	20.6	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	5.1	-	-	0.0	-	-
90.0 160.0	0.0	-	-	0.0	-	-	5.9	-	-	3.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	5.7	-	-	2.7	-	-
93.0 45.0	-	0.0	-	0.0	-	-	5.6	-	-	0.0	-	-
93.0 50.0	-	0.0	-	0.0	-	-	6.2	-	-	0.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
93.0 60.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 65.0	-	0.0	-	0.0	-	-	-	-	-	3.1	-	-
93.0 80.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 100.0	-	0.0	-	0.0	-	-	12.1	-	-	0.0	-	-
97.0 55.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
97.0 60.0	-	0.0	-	0.0	-	-	3.3	-	-	0.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	8.9	-	-	3.0	-	-
97.0 80.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0 90.0	-	-	-	0.0	-	-	3.0	-	-	0.0	-	-
100.0 40.0	0.0	-	-	0.0	-	-	9.7	-	-	0.0	-	-
100.0 50.0	0.0	-	-	0.0	-	-	4.4	-	-	0.0	-	-
100.0 65.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
100.0 70.0	0.0	-	-	0.0	-	-	15.4	-	-	0.0	-	-
100.0 80.0	0.0	-	-	2.2	-	-	12.1	-	-	0.0	-	-
100.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	7.9	-	-
103.0 55.0	-	0.0	-	0.0	-	-	9.0	-	-	0.0	-	-
107.0 50.0	-	-	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 55.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 60.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
107.0 80.0	-	0.0	-	0.0	-	-	5.8	-	-	0.0	-	-
110.0 60.0	-	0.0	-	-	0.0	-	2.5	-	-	-	0.0	-
110.0 100.0	0.0	-	-	-	0.0	-	16.8	-	-	0.0	-	-
113.0 60.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
113.0 65.0	-	0.0	-	-	0.0	-	11.4	-	-	0.0	-	-
117.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
120.0 55.0	-	0.0	-	-	0.0	-	2.0	-	-	-	0.0	-
120.0 100.0	-	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
120.0 120.0	-	0.0	-	-	2.7	-	2.4	-	-	-	0.0	-
130.0 70.0	-	0.0	-	-	0.0	-	7.0	-	-	-	0.0	-
130.0 80.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-

*Lampadena urophaos*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 200.0	0.0	-	-	2.7	-	-	7.8	-	-	0.0	-	-
80.0 200.0	0.0	-	-	0.0	-	-	8.3	-	-	0.0	-	-



TABLE 4. (cont.)

*Lampadena urophaos* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 160.0	0.0	-	-	0.0	-	-	8.9	-	-	0.0	-	-
90.0 180.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	4.1	-	-	0.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 100.0	0.0	-	-	0.0	-	-	9.3	-	-	2.6	-	-
103.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 90.0	-	-	-	0.0	-	-	0.0	-	-	5.6	-	-
107.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0 90.0	-	-	-	2.8	-	-	0.0	-	-	0.0	-	-
110.0 70.0	-	0.0	-	-	0.0	-	3.3	-	-	0.0	-	-
110.0 100.0	0.0	-	-	-	0.0	-	44.1	-	-	0.0	-	-
113.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	2.8	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.8	-	-
117.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	2.7	-	-
117.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	22.9	-	-
117.0 90.0	-	-	-	-	2.7	-	0.0	-	-	25.9	-	-
120.0 55.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 65.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
120.0 70.0	-	0.0	-	-	0.0	-	5.4	-	-	-	2.8	-
120.0 100.0	-	0.0	-	-	2.3	-	8.8	-	-	-	5.9	-
120.0 120.0	-	0.0	-	-	0.0	-	7.2	-	-	-	0.0	-
123.0 50.0	-	0.0	-	-	0.0	-	3.0	-	-	-	0.0	-
123.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
123.0 70.0	-	-	-	-	0.0	-	5.4	-	-	-	0.0	-
123.0 80.0	-	-	-	-	0.0	-	19.3	-	-	-	0.0	-
127.0 40.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
127.0 65.0	-	-	-	-	2.6	-	2.4	-	-	-	0.0	-
127.0 70.0	-	-	-	-	0.0	-	0.0	-	-	-	2.6	-
127.0 80.0	-	-	-	-	0.0	-	0.0	-	-	-	2.2	-
130.0 80.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
130.0 90.0	-	2.8	-	-	10.3	-	0.0	-	-	-	2.9	-
130.0 120.0	-	0.0	-	-	13.9	-	2.8	-	-	-	2.5	-
133.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
133.0 55.0	-	0.0	-	-	0.0	-	5.4	-	-	-	0.0	-
133.0 80.0	-	-	-	-	0.0	-	2.7	-	-	-	-	-
137.0 60.0	-	0.0	-	-	0.0	-	7.9	-	-	-	0.0	-
137.0 80.0	-	0.0	-	-	0.0	-	2.7	-	-	-	2.6	-

*Lampanyctus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	0.0	-	-	0.0	-	-	23.2	-	-	0.0	-	-
60.0 80.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 90.0	1.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Lampanyctus* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	2.9	-	-	7.0	-	-
60.0 140.0	0.0	-	-	2.6	-	-	0.0	-	-	2.9	-	-
60.0 160.0	0.0	-	-	19.5	-	-	22.7	-	-	0.0	-	-
60.0 180.0	2.6	-	-	2.9	-	-	2.3	-	-	2.6	-	-
60.0 200.0	5.6	-	-	16.0	-	-	16.8	-	-	0.0	-	-
70.0 70.0	0.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
70.0 80.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	6.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	1.5	-	-	8.1	-	-
70.0 200.0	0.0	-	-	11.0	-	-	34.9	-	-	7.2	-	-
80.0 200.0	2.5	-	-	4.7	-	-	13.9	-	-	0.0	-	-
87.0 45.0	-	2.7	-	0.0	-	-	0.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	8.8	-	-	0.0	-	-
90.0 53.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 90.0	3.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	17.2	-	-
90.0 120.0	2.5	-	-	0.0	-	-	11.8	-	-	0.0	-	-
90.0 140.0	18.8	-	-	2.5	-	-	2.5	-	-	0.0	-	-
90.0 160.0	0.0	-	-	3.5	-	-	14.9	-	-	0.0	-	-
90.0 180.0	2.3	-	-	2.7	-	-	3.1	-	-	0.0	-	-
90.0 200.0	2.1	-	-	2.0	-	-	2.8	-	-	0.0	-	-
93.0 40.0	-	0.0	-	0.0	-	-	0.0	-	-	2.4	-	-
93.0 45.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
93.0 50.0	-	2.9	-	0.0	-	-	3.1	-	-	3.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.1	-	-
93.0 100.0	-	2.7	-	3.3	-	-	0.0	-	-	3.0	-	-
97.0 60.0	-	3.0	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
97.0 70.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
97.0 80.0	-	2.5	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0 90.0	-	-	-	0.0	-	-	3.0	-	-	0.0	-	-
100.0 50.0	2.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 80.0	0.0	-	-	0.0	-	-	4.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	2.3	-	-	0.0	-	-	4.5	-	-
100.0 100.0	0.0	-	-	5.9	-	-	2.3	-	-	5.2	-	-
100.0 120.0	2.7	-	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0 30.0	-	0.0	-	0.0	-	-	5.3	-	-	0.0	-	-
103.0 40.0	-	0.0	-	0.0	-	-	36.0	-	-	2.9	-	-
103.0 55.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0 70.0	-	16.1	-	5.7	-	-	0.0	-	-	0.0	-	-
107.0 55.0	-	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0 60.0	-	5.8	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0 70.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-

TABLE 4. (cont.)

*Lampanyctus* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0	80.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
110.0	33.0	0.0	-	0.0	-	-	3.8	-	-	-	0.0	-
110.0	40.0	0.0	-	12.0	-	-	0.0	-	-	-	0.0	-
110.0	50.0	2.9	-	0.0	-	-	0.0	-	-	-	0.0	-
110.0	60.0	0.0	-	0.0	-	-	2.5	-	-	-	0.0	-
110.0	65.0	0.0	-	0.0	-	-	1.9	-	-	-	0.0	-
110.0	80.0	-	-	6.9	-	-	0.0	-	-	0.0	-	-
110.0	90.0	3.0	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0	100.0	5.4	-	0.0	-	-	8.4	-	-	0.0	-	-
110.0	120.0	2.6	-	0.0	-	-	0.0	-	-	0.0	-	-
113.0	70.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
117.0	60.0	6.0	-	0.0	-	-	0.0	-	-	0.0	-	-
117.0	65.0	3.2	-	0.0	-	-	0.0	-	-	0.0	-	-
117.0	70.0	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
117.0	80.0	0.0	-	5.3	-	-	0.0	-	-	0.0	-	-
120.0	45.0	0.0	-	5.2	-	-	0.0	-	-	-	0.0	-
120.0	55.0	0.0	-	0.0	-	-	2.0	-	-	-	0.0	-
120.0	60.0	6.3	-	0.0	-	-	0.0	-	-	-	0.0	-
120.0	65.0	5.7	-	0.0	-	-	0.0	-	-	-	0.0	-
120.0	70.0	2.8	-	2.8	-	-	2.7	-	-	-	2.8	-
120.0	80.0	3.0	-	0.0	-	-	0.0	-	-	-	0.0	-
120.0	100.0	6.0	-	6.8	-	-	2.2	-	-	-	0.0	-
123.0	55.0	5.7	-	0.0	-	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	-	-	2.7	-	-	-	0.0	-
123.0	80.0	-	-	0.0	-	-	5.5	-	-	-	0.0	-
127.0	70.0	-	-	0.0	-	-	2.8	-	-	-	0.0	-
127.0	80.0	-	-	0.0	-	-	2.9	-	-	-	6.7	-
130.0	50.0	0.0	-	0.0	-	-	2.9	-	-	-	0.0	-
130.0	55.0	2.4	-	2.7	-	-	0.0	-	-	-	2.5	-
130.0	70.0	5.5	-	0.0	-	-	3.5	-	-	-	0.0	-
130.0	80.0	0.0	-	5.8	-	-	8.1	-	-	-	0.0	-
130.0	90.0	0.0	-	4.1	-	-	0.0	-	-	-	0.0	-
130.0	100.0	30.9	-	0.0	-	-	0.0	-	-	-	2.4	-
130.0	120.0	14.3	-	5.5	-	-	8.6	-	-	-	2.5	-
133.0	40.0	6.2	-	0.0	-	-	0.0	-	-	-	-	-
133.0	55.0	2.8	-	0.0	-	-	0.0	-	-	-	5.8	-
133.0	80.0	-	-	0.0	-	-	5.4	-	-	-	-	-
137.0	30.0	0.0	-	0.0	-	-	0.0	-	-	-	2.8	-
137.0	35.0	0.0	-	0.0	-	-	0.0	-	-	-	3.0	-
137.0	50.0	2.6	-	0.0	-	-	0.0	-	-	-	5.6	-
137.0	55.0	0.0	-	0.0	-	-	0.0	-	-	-	8.1	-
137.0	60.0	2.4	-	0.0	-	-	2.6	-	-	-	5.7	-
137.0	70.0	2.5	-	0.0	-	-	0.0	-	-	-	0.0	-
137.0	80.0	5.2	-	0.0	-	-	0.0	-	-	-	0.0	-
140.0	40.0	-	-	-	-	-	-	-	-	-	2.4	-

TABLE 4. (cont.)

*Lampanyctus regalis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0	90.0	0.0	-	2.4	-	-	0.0	-	-	0.0	-	-
80.0	60.0	0.0	-	0.0	-	3.5	-	-	-	0.0	-	-
80.0	80.0	0.0	-	0.0	-	2.0	-	-	-	0.0	-	-
80.0	90.0	0.0	-	3.8	-	-	0.0	-	-	0.0	-	-
83.0	60.0	-	-	0.0	-	-	6.0	-	-	0.0	-	-
83.0	70.0	0.0	-	0.0	-	-	8.7	-	-	0.0	-	-
87.0	65.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0	70.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
93.0	60.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0	80.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0	90.0	0.0	-	0.0	-	-	6.3	-	-	0.0	-	-
97.0	35.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
110.0	65.0	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-

*Lampanyctus ritteri*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	55.0	-	-	0.0	-	-	4.4	-	-	0.0	-	-
60.0	70.0	-	-	10.1	-	-	0.0	-	-	0.0	-	-
60.0	100.0	-	-	3.8	-	-	1.8	-	-	0.0	-	-
60.0	120.0	-	-	8.8	-	-	31.7	-	-	0.0	-	-
60.0	160.0	-	-	0.0	-	-	14.2	-	-	0.0	-	-
63.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	60.0	-	-	0.0	-	-	0.0	-	-	5.8	-	-
67.0	60.0	-	-	0.0	-	-	0.0	-	-	8.0	-	-
70.0	60.0	-	-	0.0	-	-	11.6	-	-	0.0	-	-
70.0	70.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
70.0	80.0	-	-	4.8	-	-	0.0	-	-	0.0	-	-
70.0	90.0	-	-	14.4	-	-	0.0	-	-	0.0	-	-
70.0	100.0	-	-	10.3	-	-	18.7	-	-	0.0	-	-
70.0	120.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
73.0	60.0	-	-	6.5	-	0.0	-	-	-	0.0	-	-
77.0	51.0	-	-	3.7	-	1.8	-	-	-	0.0	-	-
77.0	55.0	-	-	0.0	-	0.0	-	-	-	2.5	-	-
77.0	57.0	-	-	2.4	-	0.0	-	-	-	0.0	-	-
80.0	52.0	2.4	-	2.4	-	0.0	-	-	-	0.0	-	-
80.0	60.0	0.0	-	0.0	-	6.9	-	-	-	5.1	-	-
80.0	65.0	0.0	-	3.0	-	2.2	-	-	-	0.0	-	-
80.0	70.0	0.0	-	7.8	-	0.0	-	-	-	0.0	-	-
80.0	80.0	2.7	-	14.6	-	16.2	-	-	-	0.0	-	-
80.0	90.0	0.0	-	3.8	-	-	25.6	-	-	2.6	-	-
80.0	100.0	9.7	-	2.2	-	-	0.0	-	-	2.8	-	-
80.0	120.0	0.0	-	21.8	-	-	0.0	-	-	5.8	-	-
83.0	55.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
83.0	60.0	-	-	0.0	-	-	9.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Lampanyctus ritteri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0 65.0	-	0.0	-	0.0	-	-	26.4	-	-	0.0	-	-
83.0 80.0	-	2.8	-	0.0	-	-	5.8	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 60.0	-	0.0	-	5.7	-	-	5.7	-	-	0.0	-	-
87.0 70.0	-	0.0	-	9.2	-	-	26.5	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
90.0 60.0	1.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 65.0	3.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0 70.0	0.0	-	-	2.8	-	-	21.2	-	-	0.0	-	-
90.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	2.3	-	-
90.0 100.0	0.0	-	-	22.3	-	-	0.0	-	-	0.0	-	-
90.0 120.0	2.5	-	-	17.9	-	-	0.0	-	-	0.0	-	-
93.0 55.0	-	2.8	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 70.0	-	9.1	-	0.0	-	-	-	-	-	0.0	-	-
93.0 80.0	-	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 100.0	-	0.0	-	3.3	-	-	6.1	-	-	0.0	-	-
97.0 35.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0 40.0	-	0.0	-	11.6	-	-	0.0	-	-	0.0	-	-
97.0 55.0	-	-	-	11.8	-	-	0.0	-	-	8.6	-	-
97.0 60.0	-	0.0	-	0.0	-	-	6.7	-	-	0.0	-	-
97.0 65.0	-	3.1	-	3.0	-	-	6.0	-	-	0.0	-	-
97.0 80.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0 90.0	-	-	-	10.8	-	-	0.0	-	-	0.0	-	-
100.0 35.0	0.0	-	-	11.2	-	-	0.0	-	-	0.0	-	-
100.0 40.0	0.0	-	-	4.7	-	-	3.2	-	-	3.2	-	-
100.0 45.0	0.0	-	-	3.8	-	-	0.0	-	-	0.0	-	-
100.0 55.0	2.3	-	-	7.7	-	-	0.0	-	-	3.0	-	-
100.0 60.0	2.8	-	-	2.6	-	-	0.0	-	-	0.0	-	-
100.0 65.0	2.3	-	-	0.0	-	-	2.5	-	-	0.0	-	-
100.0 70.0	0.0	-	-	2.2	-	-	5.1	-	-	2.0	-	-
100.0 80.0	0.0	-	-	2.3	-	-	20.1	-	-	0.0	-	-
100.0 90.0	0.0	-	-	32.6	-	-	0.0	-	-	0.0	-	-
100.0 100.0	0.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
103.0 35.0	-	0.0	-	8.5	-	-	0.0	-	-	0.0	-	-
103.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	9.1	-	-
103.0 65.0	-	0.0	-	0.0	-	-	3.3	-	-	0.0	-	-
103.0 70.0	-	0.0	-	0.0	-	-	12.4	-	-	0.0	-	-
103.0 80.0	-	8.3	-	0.0	-	-	6.4	-	-	0.0	-	-
103.0 90.0	-	-	-	19.3	-	-	0.0	-	-	0.0	-	-
107.0 35.0	-	0.0	-	12.9	-	-	0.0	-	-	0.0	-	-
107.0 40.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
107.0 45.0	-	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
107.0 50.0	-	-	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0 55.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-

TABLE 4. (cont.)

*Lampanyctus ritteri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0	60.0	0.0	-	26.7	-	-	14.2	-	-	0.0	-	-
107.0	65.0	0.0	-	5.1	-	-	0.0	-	-	0.0	-	-
107.0	70.0	0.0	-	9.9	-	-	0.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
110.0	55.0	0.0	-	-	17.9	-	6.4	-	-	-	0.0	-
110.0	60.0	0.0	-	-	11.2	-	5.8	-	-	-	0.0	-
110.0	65.0	0.0	-	-	0.0	-	3.3	-	-	0.0	-	-
110.0	70.0	0.0	-	-	17.1	-	0.0	-	-	0.0	-	-
110.0	80.0	0.0	-	-	6.3	-	0.0	-	-	0.0	-	-
110.0	90.0	5.9	-	-	12.4	-	0.0	-	-	0.0	-	-
110.0	120.0	0.0	-	-	2.4	-	0.0	-	-	0.0	-	-
113.0	55.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0	60.0	0.0	-	-	8.5	-	5.7	-	-	0.0	-	-
113.0	65.0	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
113.0	80.0	0.0	-	-	2.9	-	0.0	-	-	0.0	-	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0	-
117.0	50.0	0.0	-	-	0.0	-	0.0	-	-	2.6	-	-
117.0	60.0	0.0	-	-	12.8	-	2.9	-	-	0.0	-	-
117.0	70.0	0.0	-	-	0.0	-	0.0	-	-	5.8	-	-
117.0	90.0	-	-	-	5.1	-	0.0	-	-	-	0.0	-
120.0	50.0	0.0	-	-	14.6	-	0.0	-	-	-	0.0	-
120.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	60.0	3.2	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	65.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	70.0	0.0	-	-	8.5	-	0.0	-	-	-	0.0	-
120.0	90.0	0.0	-	-	7.0	-	0.0	-	-	-	0.0	-
123.0	45.0	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
123.0	80.0	-	-	-	0.0	-	8.3	-	-	-	0.0	-
127.0	40.0	0.0	-	-	0.0	-	5.5	-	-	-	0.0	-
127.0	70.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0	40.0	0.0	-	-	3.5	-	0.0	-	-	-	0.0	-
133.0	40.0	0.0	-	-	3.1	-	0.0	-	-	-	-	-

*Notolynchus valdiviae*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	180.0	-	-	2.9	-	-	2.3	-	-	0.0	-	-
60.0	200.0	-	-	2.3	-	-	8.4	-	-	0.0	-	-
70.0	200.0	-	-	0.0	-	-	11.6	-	-	0.0	-	-
80.0	200.0	-	-	4.7	-	-	0.0	-	-	0.0	-	-
90.0	120.0	-	-	0.0	-	-	8.9	-	-	3.1	-	-
90.0	140.0	-	-	0.0	-	-	5.1	-	-	0.0	-	-
90.0	160.0	-	-	1.7	-	-	26.7	-	-	3.0	-	-
90.0	180.0	-	-	0.0	-	-	0.0	-	-	2.5	-	-
90.0	200.0	-	-	4.1	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Notolychnus valdiviae* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	9.0	-	-
100.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	5.2	-	-
100.0 120.0	0.0	-	-	5.1	-	-	2.5	-	-	0.0	-	-
107.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 100.0	0.0	-	-	-	0.0	-	2.1	-	-	0.0	-	-
110.0 120.0	0.0	-	-	-	2.5	-	0.0	-	-	0.0	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.8	-	-
117.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	2.9	-	-
127.0 80.0	-	-	-	-	0.0	-	0.0	-	-	-	2.2	-
130.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.4	-

*Notoscopelus resplendens*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	0.0	-	-	0.0	-	-	4.6	-	-	0.0	-	-
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	2.9	-	-	22.7	-	-	0.0	-	-
60.0 200.0	0.0	-	-	0.0	-	-	4.2	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	1.5	-	-	0.0	-	-
70.0 200.0	0.0	-	-	2.7	-	-	7.8	-	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
80.0 200.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	5.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
90.0 140.0	0.0	-	-	5.0	-	-	2.5	-	-	0.0	-	-
90.0 160.0	0.0	-	-	8.7	-	-	5.9	-	-	0.0	-	-
90.0 200.0	0.0	-	-	10.1	-	-	0.0	-	-	5.5	-	-
100.0 80.0	0.0	-	-	0.0	-	-	2.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
100.0 120.0	0.0	-	-	0.0	-	-	20.1	-	-	0.0	-	-
103.0 65.0	-	0.0	-	0.0	-	-	6.6	-	-	0.0	-	-
103.0 70.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
110.0 55.0	-	0.0	-	-	10.3	-	0.0	-	-	-	0.0	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
110.0 80.0	0.0	-	-	-	0.0	-	9.8	-	-	0.0	-	-
110.0 90.0	0.0	-	-	-	6.3	-	0.0	-	-	0.0	-	-
110.0 100.0	0.0	-	-	-	0.0	-	25.2	-	-	2.8	-	-
110.0 120.0	2.6	-	-	-	12.4	-	0.0	-	-	2.0	-	-
113.0 70.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
117.0 65.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-

TABLE 4. (cont.)

*Notoscopelus resplendens* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0	70.0	0.0	-	-	10.2	-	0.0	-	-	2.7	-	-
117.0	80.0	0.0	-	-	5.3	-	0.0	-	-	0.0	-	-
117.0	90.0	-	-	-	0.0	-	0.0	-	-	2.9	-	-
120.0	45.0	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
120.0	50.0	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
120.0	55.0	0.0	-	-	0.0	-	4.0	-	-	-	0.0	-
120.0	100.0	3.0	-	-	9.1	-	11.0	-	-	-	2.9	-
120.0	120.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	65.0	-	-	-	0.0	-	3.0	-	-	-	0.0	-
123.0	80.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
127.0	80.0	-	-	-	0.0	-	2.9	-	-	-	0.0	-
130.0	70.0	0.0	-	-	16.3	-	0.0	-	-	-	0.0	-
130.0	80.0	0.0	-	-	0.0	-	16.3	-	-	-	0.0	-
130.0	120.0	0.0	-	-	22.2	-	8.6	-	-	-	0.0	-
137.0	55.0	0.0	-	-	0.0	-	2.1	-	-	-	0.0	-
137.0	80.0	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-

*Stenobrachius leucopsarus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	52.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0	55.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
60.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0	70.0	-	-	40.6	-	-	9.3	-	-	0.0	-	-
60.0	80.0	-	-	13.6	-	-	2.3	-	-	0.0	-	-
60.0	90.0	-	-	19.0	-	-	0.0	-	-	0.0	-	-
63.0	52.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	55.0	-	-	6.6	-	-	0.0	-	-	0.0	-	-
63.0	60.0	-	-	4.0	-	-	0.0	-	-	0.0	-	-
67.0	50.0	-	-	19.9	-	-	0.0	-	-	0.0	-	-
67.0	55.0	-	-	183.9	-	-	5.5	-	-	0.0	-	-
67.0	60.0	-	-	6.9	-	-	0.0	-	-	0.0	-	-
70.0	53.0	-	-	50.1	-	-	3.9	-	-	0.0	-	-
70.0	55.0	-	-	126.0	-	-	19.3	-	-	0.0	-	-
70.0	60.0	-	-	166.9	-	-	0.0	-	-	0.0	-	-
70.0	70.0	-	-	110.2	-	-	0.0	-	-	0.0	-	-
70.0	80.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	90.0	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0	100.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	120.0	-	-	22.1	-	-	0.0	-	-	0.0	-	-
73.0	53.0	-	-	22.1	-	1.4	-	-	-	0.0	-	-
73.0	60.0	-	-	185.3	-	0.0	-	-	-	0.0	-	-
77.0	51.0	-	-	81.8	-	8.9	-	-	-	0.0	-	-
77.0	55.0	-	-	147.0	-	0.0	-	-	-	0.0	-	-
77.0	57.0	-	-	254.1	-	0.0	-	-	-	0.0	-	-



TABLE 4. (cont.)

*Stenobrachius leucopsarus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	52.0	0.0	-	55.0	-	3.1	-	-	-	0.0	-	-
80.0	55.0	70.5	-	23.9	-	5.4	-	-	-	0.0	-	-
80.0	60.0	32.3	-	29.3	-	3.5	-	-	-	0.0	-	-
80.0	65.0	23.1	-	82.3	-	4.3	-	-	-	2.6	-	-
80.0	70.0	4.1	-	189.8	-	0.0	-	-	-	0.0	-	-
80.0	80.0	10.8	-	8.8	-	2.0	-	-	-	0.0	-	-
80.0	90.0	0.0	-	11.4	-	-	0.0	-	-	0.0	-	-
80.0	100.0	27.2	-	0.0	-	-	0.0	-	-	0.0	-	-
82.0	47.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
83.0	43.0	-	-	16.9	-	-	0.0	-	-	0.0	-	-
83.0	51.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	55.0	-	-	16.8	-	-	0.0	-	-	0.0	-	-
83.0	60.0	-	-	2.5	-	-	3.0	-	-	0.0	-	-
83.0	65.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	70.0	-	-	24.7	-	-	2.9	-	-	0.0	-	-
83.0	80.0	-	-	55.7	-	-	0.0	-	-	0.0	-	-
83.0	90.0	-	-	20.4	-	-	0.0	-	-	0.0	-	-
87.0	35.0	-	-	3.1	-	-	0.0	-	-	0.0	-	-
87.0	40.0	-	-	3.5	-	-	0.0	-	-	0.0	-	-
87.0	45.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0	50.0	-	-	5.9	-	-	0.0	-	-	0.0	-	-
87.0	55.0	-	-	9.1	-	-	0.0	-	-	0.0	-	-
87.0	60.0	-	-	48.4	-	-	0.0	-	-	0.0	-	-
87.0	65.0	-	-	57.8	-	-	0.0	-	-	0.0	-	-
87.0	70.0	-	-	40.0	-	-	2.9	-	-	0.0	-	-
87.0	80.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
87.0	90.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0	28.0	-	-	12.4	-	-	0.0	-	-	0.0	-	-
90.0	32.0	-	-	61.0	-	-	0.0	-	-	0.0	-	-
90.0	37.0	-	-	22.3	-	-	0.0	-	-	0.0	-	-
90.0	45.0	-	-	18.4	-	-	0.0	-	-	0.0	-	-
90.0	53.0	-	-	21.3	-	-	0.0	-	-	0.0	-	-
90.0	65.0	-	-	40.9	-	-	4.1	-	-	0.0	-	-
90.0	70.0	-	-	8.4	-	-	2.7	-	-	0.0	-	-
90.0	80.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	90.0	-	-	11.2	-	-	0.0	-	-	0.0	-	-
90.0	100.0	-	-	36.3	-	-	0.0	-	-	0.0	-	-
90.0	120.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	28.0	-	-	23.2	-	-	0.0	-	-	0.0	-	-
93.0	30.0	-	-	9.0	-	-	0.0	-	-	0.0	-	-
93.0	35.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	40.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	45.0	-	-	3.6	-	-	2.8	-	-	0.0	-	-
93.0	50.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
93.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	60.0	-	-	11.5	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Stenobrachius leucopsarus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0	65.0	0.0	-	14.6	-	-	-	-	-	0.0	-	-
93.0	70.0	6.1	-	3.7	-	-	-	-	-	0.0	-	-
93.0	90.0	0.0	-	0.0	-	-	6.3	-	-	0.0	-	-
97.0	32.0	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
97.0	35.0	0.0	-	15.3	-	-	0.0	-	-	0.0	-	-
97.0	40.0	0.0	-	8.7	-	-	0.0	-	-	0.0	-	-
97.0	45.0	0.0	-	20.9	-	-	2.9	-	-	0.0	-	-
97.0	50.0	0.0	-	5.6	-	-	0.0	-	-	0.0	-	-
97.0	60.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0	65.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	70.0	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0	80.0	0.0	-	8.5	-	-	0.0	-	-	0.0	-	-
97.0	90.0	-	-	3.6	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	40.5	-	-	0.0	-	-	0.0	-	-
100.0	35.0	0.0	-	19.7	-	-	4.6	-	-	0.0	-	-
100.0	40.0	0.0	-	11.8	-	-	0.0	-	-	0.0	-	-
100.0	45.0	0.0	-	22.9	-	-	0.0	-	-	0.0	-	-
100.0	50.0	0.0	-	3.0	-	-	8.8	-	-	0.0	-	-
100.0	55.0	7.0	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	65.0	4.6	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	70.0	3.1	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	80.0	2.7	-	2.2	-	-	0.0	-	-	0.0	-	-
100.0	90.0	0.0	-	9.0	-	-	0.0	-	-	0.0	-	-
100.0	100.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
103.0	30.0	-	-	4.4	-	-	0.0	-	-	0.0	-	-
103.0	35.0	0.0	-	5.9	-	-	0.0	-	-	0.0	-	-
103.0	40.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
103.0	45.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0	80.0	0.0	-	0.0	-	-	3.2	-	-	0.0	-	-
107.0	32.0	0.0	-	0.0	-	-	12.1	-	-	0.0	-	-
113.0	90.0	-	-	-	0.0	-	0.0	-	-	2.8	-	-

*Triphoturus mexicanus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	52.0	0.0	-	0.0	-	0.0	-	-	-	3.0	-	-
80.0	65.0	0.0	-	0.0	-	0.0	-	-	-	7.8	-	-
83.0	51.0	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0	55.0	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
83.0	60.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	70.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0	35.0	0.0	-	0.0	-	-	2.9	-	-	100.3	-	-
87.0	40.0	0.0	-	0.0	-	-	11.6	-	-	8.7	-	-
87.0	45.0	0.0	-	0.0	-	-	0.0	-	-	17.1	-	-
87.0	50.0	0.0	-	0.0	-	-	0.0	-	-	4.5	-	-

TABLE 4. (cont.)

Triphoturus mexicanus (cont.)												
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0	55.0	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
87.0	60.0	0.0	-	0.0	-	-	34.1	-	-	0.0	-	-
87.0	65.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0	70.0	0.0	-	0.0	-	-	0.0	-	-	4.8	-	-
87.0	80.0	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0	32.0	-	-	0.0	-	-	7.7	-	-	2.2	-	-
90.0	37.0	-	-	0.0	-	-	0.0	-	-	3.6	-	-
90.0	45.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
90.0	53.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0	65.0	-	-	2.9	-	-	4.1	-	-	2.6	-	-
90.0	70.0	-	-	0.0	-	-	10.6	-	-	0.0	-	-
90.0	80.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0	100.0	-	-	2.8	-	-	2.6	-	-	8.6	-	-
90.0	120.0	-	-	0.0	-	-	8.9	-	-	0.0	-	-
90.0	140.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
93.0	28.0	0.0	-	0.0	-	-	0.0	-	-	5.3	-	-
93.0	30.0	0.0	-	0.0	-	-	13.4	-	-	0.0	-	-
93.0	35.0	0.0	-	0.0	-	-	16.1	-	-	4.7	-	-
93.0	40.0	0.0	-	0.0	-	-	0.0	-	-	2.4	-	-
93.0	45.0	0.0	-	0.0	-	-	2.8	-	-	7.7	-	-
93.0	50.0	0.0	-	0.0	-	-	15.6	-	-	0.0	-	-
93.0	55.0	0.0	-	0.0	-	-	20.9	-	-	0.0	-	-
93.0	60.0	0.0	-	2.9	-	-	6.1	-	-	0.0	-	-
93.0	65.0	0.0	-	5.8	-	-	-	-	-	0.0	-	-
93.0	70.0	0.0	-	14.7	-	-	-	-	-	0.0	-	-
93.0	90.0	0.0	-	3.2	-	-	12.6	-	-	0.0	-	-
93.0	100.0	0.0	-	0.0	-	-	72.7	-	-	0.0	-	-
97.0	30.0	0.0	-	0.0	-	-	10.3	-	-	0.0	-	-
97.0	32.0	0.0	-	0.0	-	-	2.7	-	-	5.4	-	-
97.0	35.0	0.0	-	3.0	-	-	3.0	-	-	0.0	-	-
97.0	40.0	2.8	-	17.3	-	-	0.0	-	-	8.5	-	-
97.0	45.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
97.0	50.0	0.0	-	0.0	-	-	6.2	-	-	2.5	-	-
97.0	55.0	-	-	23.6	-	-	3.1	-	-	0.0	-	-
97.0	60.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0	65.0	0.0	-	6.1	-	-	17.9	-	-	0.0	-	-
97.0	70.0	0.0	-	0.0	-	-	12.3	-	-	0.0	-	-
100.0	30.0	-	-	0.0	-	-	42.1	-	-	0.0	-	-
100.0	35.0	-	-	171.4	-	-	13.7	-	-	8.5	-	-
100.0	40.0	-	-	289.0	-	-	19.4	-	-	0.0	-	-
100.0	45.0	-	-	24.8	-	-	3.3	-	-	0.0	-	-
100.0	50.0	-	-	23.8	-	-	13.3	-	-	2.6	-	-
100.0	55.0	-	-	11.0	-	-	0.0	-	-	3.0	-	-
100.0	60.0	-	-	10.2	-	-	2.2	-	-	29.6	-	-
100.0	65.0	-	-	7.9	-	-	12.8	-	-	27.4	-	-
100.0	70.0	0.0	-	0.0	-	-	7.7	-	-	4.1	-	-

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0	80.0	0.0	-	2.2	-	-	4.0	-	-	0.0	-	-
100.0	90.0	0.0	-	31.6	-	-	8.3	-	-	3.0	-	-
100.0	100.0	0.0	-	26.6	-	-	0.0	-	-	0.0	-	-
100.0	120.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
103.0	30.0	0.0	-	0.0	-	-	31.9	-	-	4.1	-	-
103.0	35.0	0.0	-	121.0	-	-	28.4	-	-	2.8	-	-
103.0	40.0	0.0	-	3.1	-	-	5.7	-	-	17.5	-	-
103.0	45.0	0.0	-	5.8	-	-	41.7	-	-	5.5	-	-
103.0	50.0	0.0	-	0.0	-	-	3.0	-	-	26.5	-	-
103.0	55.0	0.0	-	5.7	-	-	21.0	-	-	9.0	-	-
103.0	60.0	0.0	-	17.5	-	-	6.0	-	-	57.8	-	-
103.0	65.0	0.0	-	25.1	-	-	36.5	-	-	13.6	-	-
103.0	70.0	0.0	-	71.5	-	-	46.3	-	-	26.6	-	-
103.0	80.0	0.0	-	2.7	-	-	0.0	-	-	5.0	-	-
103.0	90.0	-	-	22.0	-	-	0.0	-	-	0.0	-	-
107.0	32.0	0.0	-	20.4	-	-	12.1	-	-	14.3	-	-
107.0	35.0	0.0	-	29.0	-	-	7.7	-	-	22.4	-	-
107.0	40.0	0.0	-	12.2	-	-	0.0	-	-	47.6	-	-
107.0	45.0	0.0	-	8.2	-	-	9.6	-	-	34.8	-	-
107.0	50.0	-	-	25.8	-	-	39.9	-	-	0.0	-	-
107.0	55.0	0.0	-	11.5	-	-	31.3	-	-	2.9	-	-
107.0	60.0	0.0	-	98.0	-	-	48.3	-	-	5.9	-	-
107.0	65.0	0.0	-	72.0	-	-	46.7	-	-	0.0	-	-
107.0	70.0	0.0	-	54.3	-	-	12.6	-	-	0.0	-	-
107.0	80.0	0.0	-	20.5	-	-	5.8	-	-	5.9	-	-
107.0	90.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	0.0	-	11.3	-	-	-	8.6	-
110.0	35.0	0.0	-	-	5.3	-	17.4	-	-	17.5	17.5	-
110.0	40.0	0.0	-	-	40.0	-	12.1	-	-	-	8.0	-
110.0	45.0	0.0	-	-	37.4	-	19.9	-	-	-	2.7	-
110.0	50.0	0.0	-	-	37.5	-	10.9	-	-	-	3.0	-
110.0	55.0	0.0	-	-	133.8	-	76.3	-	-	-	0.0	-
110.0	60.0	0.0	-	-	153.0	-	116.1	-	-	-	104.5	-
110.0	65.0	0.0	-	-	126.0	-	120.3	-	-	-	40.8	-
110.0	70.0	0.0	-	-	71.5	-	63.6	-	-	-	-	-
110.0	80.0	0.0	-	-	240.1	-	3.3	-	-	8.3	-	-
110.0	90.0	0.0	-	-	163.3	-	95.2	-	-	21.7	-	-
110.0	100.0	0.0	-	-	62.4	-	21.0	-	-	0.0	-	-
110.0	120.0	0.0	-	-	87.2	-	4.7	-	-	0.0	-	-
113.0	30.0	0.0	-	-	2.3	-	-	-	-	0.0	-	-
113.0	35.0	0.0	-	-	10.8	-	2.6	-	-	5.8	-	-
113.0	40.0	0.0	-	-	2.6	-	8.3	-	-	5.9	-	-
113.0	45.0	0.0	-	-	17.9	-	14.3	-	-	5.0	-	-
113.0	50.0	0.0	-	-	36.5	-	16.0	-	-	11.6	-	-
113.0	55.0	0.0	-	-	35.4	-	2.9	-	-	3.0	-	-
113.0	60.0	0.0	-	-	64.5	-	64.6	-	-	2.9	-	-

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	65.0	0.0	-	-	64.9	-	79.8	-	-	41.7	-	-
113.0	70.0	5.8	-	-	10.5	-	51.7	-	-	11.6	-	-
113.0	80.0	0.0	-	-	5.6	-	8.6	-	-	2.9	-	-
113.0	90.0	-	-	-	0.0	-	13.9	-	-	0.0	-	-
115.0	35.0	0.0	-	-	-	-	11.1	-	-	-	-	-
117.0	30.0	0.0	-	-	2.5	-	5.6	-	-	-	0.0	-
117.0	35.0	0.0	-	-	16.0	-	25.5	-	-	-	0.0	-
117.0	40.0	0.0	-	-	43.4	-	5.9	-	-	-	27.4	-
117.0	45.0	0.0	-	-	13.5	-	8.9	-	-	-	22.1	-
117.0	50.0	0.0	-	-	14.7	-	14.7	-	-	23.5	-	-
117.0	55.0	0.0	-	-	2.5	-	23.1	-	-	10.4	-	-
117.0	60.0	9.0	-	-	5.8	-	61.5	-	-	16.6	-	-
117.0	65.0	6.5	-	-	53.3	-	56.4	-	-	2.8	-	-
117.0	70.0	8.8	-	-	35.8	-	11.0	-	-	2.7	-	-
117.0	80.0	5.4	-	-	29.2	-	17.6	-	-	11.4	-	-
117.0	90.0	-	-	-	5.4	-	15.7	-	-	5.8	-	-
118.0	39.0	0.0	-	-	2.4	-	9.2	-	-	-	0.0	-
119.0	33.0	0.0	-	-	-	-	7.8	-	-	-	0.0	-
120.0	45.0	2.9	-	-	26.0	-	17.7	-	-	-	26.8	-
120.0	50.0	0.0	-	-	22.9	-	108.0	-	-	-	17.5	-
120.0	55.0	0.0	-	-	56.4	-	187.9	-	-	-	5.3	-
120.0	60.0	0.0	-	-	55.6	-	57.2	-	-	-	26.3	-
120.0	65.0	11.4	-	-	48.5	-	21.5	-	-	-	2.7	-
120.0	70.0	0.0	-	-	42.3	-	81.3	-	-	-	11.4	-
120.0	80.0	0.0	-	-	29.2	-	10.6	-	-	-	7.4	-
120.0	90.0	0.0	-	-	104.4	-	41.3	-	-	-	5.0	-
120.0	100.0	0.0	-	-	6.8	-	214.6	-	-	-	17.6	-
120.0	120.0	0.0	-	-	0.0	-	2.4	-	-	-	2.3	-
123.0	37.0	5.5	-	-	0.0	-	0.0	-	-	-	20.8	-
123.0	42.0	8.8	-	-	0.0	-	6.2	-	-	-	0.0	-
123.0	45.0	0.0	-	-	31.4	-	41.2	-	-	-	0.0	-
123.0	50.0	0.0	-	-	34.4	-	39.1	-	-	-	0.0	-
123.0	55.0	8.6	-	-	11.0	-	28.8	-	-	-	2.6	-
123.0	60.0	0.0	-	-	14.3	-	26.0	-	-	-	14.7	-
123.0	65.0	-	-	-	26.6	-	35.4	-	-	-	9.1	-
123.0	70.0	-	-	-	20.2	-	35.2	-	-	-	0.0	-
123.0	80.0	-	-	-	103.0	-	259.4	-	-	-	5.6	-
127.0	34.0	0.0	-	-	21.2	-	4.6	-	-	-	5.1	-
127.0	40.0	0.0	-	-	93.4	-	199.3	-	-	-	11.8	-
127.0	45.0	8.8	-	-	32.9	-	14.3	-	-	-	6.6	-
127.0	50.0	0.0	-	-	0.0	-	40.5	-	-	-	0.0	-
127.0	55.0	0.0	-	-	5.5	-	12.9	-	-	-	0.0	-
127.0	60.0	2.9	-	-	7.7	-	61.4	-	-	-	6.0	-
127.0	65.0	-	-	-	2.6	-	39.0	-	-	-	11.5	-
127.0	70.0	-	-	-	15.9	-	13.9	-	-	-	0.0	-
127.0	80.0	-	-	-	11.8	-	23.2	-	-	-	4.4	-

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0	35.0	0.0	-	-	85.6	-	0.0	-	-	-	2.0	-
130.0	40.0	0.0	-	-	145.3	-	24.2	-	-	-	0.0	-
130.0	45.0	0.0	-	-	24.1	-	29.4	-	-	-	2.9	-
130.0	50.0	0.0	-	-	37.0	-	14.5	-	-	-	6.7	-
130.0	55.0	0.0	-	-	32.3	-	6.8	-	-	-	7.5	-
130.0	60.0	0.0	-	-	35.2	-	22.5	-	-	-	0.0	-
130.0	70.0	0.0	-	-	155.0	-	21.0	-	-	-	18.7	-
130.0	80.0	2.8	-	-	31.8	-	314.4	-	-	-	0.0	-
130.0	90.0	0.0	-	-	12.4	-	9.5	-	-	-	8.6	-
130.0	100.0	0.0	-	-	10.3	-	4.7	-	-	-	0.0	-
130.0	120.0	14.3	-	-	33.2	-	8.6	-	-	-	0.0	-
133.0	35.0	3.3	-	-	2.9	-	5.7	-	-	-	5.5	-
133.0	40.0	9.3	-	-	70.4	-	0.0	-	-	-	-	-
133.0	45.0	0.0	-	-	143.6	-	20.9	-	-	-	2.9	-
133.0	50.0	0.0	-	-	68.6	-	41.3	-	-	-	56.0	-
133.0	55.0	5.7	-	-	116.4	-	45.9	-	-	-	0.0	-
133.0	60.0	0.0	-	-	14.6	-	44.9	-	-	-	6.1	-
133.0	65.0	-	-	-	0.0	-	8.0	-	-	-	18.4	-
133.0	70.0	-	-	-	0.0	-	19.3	-	-	-	8.6	-
133.0	80.0	-	-	-	20.0	-	35.4	-	-	-	-	-
137.0	30.0	0.0	-	-	0.0	-	35.6	-	-	-	5.5	-
137.0	35.0	14.4	-	-	0.0	-	10.3	-	-	-	0.0	-
137.0	40.0	16.5	-	-	0.0	-	20.0	-	-	-	0.0	-
137.0	45.0	0.0	-	-	5.6	-	9.8	-	-	-	14.5	-
137.0	50.0	2.6	-	-	0.0	-	3.5	-	-	-	14.1	-
137.0	55.0	5.0	-	-	0.0	-	43.9	-	-	-	8.1	-
137.0	60.0	0.0	-	-	0.0	-	5.3	-	-	-	0.0	-
137.0	70.0	17.1	-	-	0.0	-	12.6	-	-	-	2.6	-
137.0	80.0	7.8	-	-	11.5	-	8.2	-	-	-	5.3	-
140.0	35.0	-	-	-	-	-	-	-	-	-	2.6	-

*Triphoturus nigrescens*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0	200.0	-	-	0.0	-	-	7.8	-	-	0.0	-	-
80.0	200.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0	140.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
93.0	100.0	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-

*Centrobranchus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	120.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0	200.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-

TABLE 4. (cont.)

<i>Diogenichthys</i> spp.											
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.
60.0 180.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-
70.0 90.0	0.0	-	-	0.0	-	-	5.7	-	-	0.0	-
70.0 120.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-
80.0 200.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-
100.0 90.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-
100.0 120.0	2.7	-	-	0.0	-	-	0.0	-	-	0.0	-
107.0 80.0	-	0.0	-	2.6	-	-	0.0	-	-	0.0	-
110.0 70.0	-	0.0	-	-	5.5	-	0.0	-	-	0.0	-
110.0 120.0	5.2	-	-	-	2.5	-	0.0	-	-	0.0	-
113.0 60.0	-	-	-	-	0.0	-	0.0	-	-	0.0	-
120.0 45.0	-	2.7	-	-	0.0	-	0.0	-	-	0.0	0.0
120.0 50.0	-	5.8	-	-	0.0	-	0.0	-	-	-	0.0
120.0 55.0	-	2.9	-	-	0.0	-	4.0	-	-	-	0.0
120.0 65.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0
120.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0
120.0 70.0	-	5.6	-	-	0.0	-	0.0	-	-	-	0.0
120.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	-	4.9
120.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0
120.0 100.0	-	0.0	-	-	7.0	-	0.0	-	-	-	0.0
120.0 120.0	-	0.0	-	-	0.0	-	4.4	-	-	-	0.0
123.0 55.0	-	5.9	-	-	0.0	-	0.0	-	-	-	2.3
123.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0
123.0 80.0	-	5.8	-	-	0.0	-	2.8	-	-	-	0.0
127.0 34.0	-	-	-	-	0.0	-	0.0	-	-	-	0.0
127.0 40.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0
127.0 45.0	-	3.2	-	-	0.0	-	0.0	-	-	-	0.0
127.0 50.0	-	8.8	-	-	0.0	-	0.0	-	-	-	0.0
127.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8
127.0 65.0	-	-	-	-	2.6	-	0.0	-	-	-	0.0
127.0 80.0	-	-	-	-	0.0	-	0.0	-	-	-	6.7
130.0 35.0	-	5.0	-	-	0.0	-	0.0	-	-	-	0.0
130.0 45.0	-	0.0	-	-	6.0	-	0.0	-	-	-	0.0
130.0 55.0	-	4.9	-	-	0.0	-	0.0	-	-	-	2.5
130.0 60.0	-	6.9	-	-	0.0	-	0.0	-	-	-	0.0
130.0 70.0	-	0.0	-	-	0.0	-	14.0	-	-	-	6.2
130.0 80.0	-	0.0	-	-	92.5	-	86.7	-	-	-	0.0
130.0 90.0	-	0.0	-	-	43.5	-	0.0	-	-	-	2.9
133.0 30.0	-	2.6	-	-	0.0	-	0.0	-	-	-	-
133.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8
133.0 55.0	-	0.0	-	-	0.0	-	5.4	-	-	-	0.0
133.0 60.0	-	0.0	-	-	0.0	-	2.6	-	-	-	0.0
133.0 65.0	-	0.0	-	-	0.0	-	13.3	-	-	-	0.0
133.0 70.0	-	-	-	-	0.0	-	5.5	-	-	-	0.0
137.0 30.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0
137.0 50.0	-	0.0	-	-	11.1	-	0.0	-	-	-	0.0
137.0 55.0	-	0.0	-	-	0.0	-	2.1	-	-	-	0.0
137.0 60.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0
140.0 45.0	-	-	-	-	-	-	-	-	-	-	2.9

TABLE 4. (cont.)

*Diogenichthys* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
140.0 50.0	-	-	-	-	-	-	-	-	-	-	3.4	-

*Diogenichthys atlanticus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	14.4	-	-	7.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
60.0 160.0	0.0	-	-	3.9	-	-	19.9	-	-	2.7	-	-
60.0 180.0	13.0	-	-	57.4	-	-	15.9	-	-	5.2	-	-
60.0 200.0	16.9	-	-	2.3	-	-	12.6	-	-	2.7	-	-
70.0 100.0	0.0	-	-	0.0	-	-	52.4	-	-	0.0	-	-
70.0 200.0	0.0	-	-	16.4	-	-	3.9	-	-	7.2	-	-
80.0 60.0	1.5	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 65.0	2.1	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 70.0	0.0	2.3	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	7.7	-	-
80.0 100.0	1.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	3.6	-	-	8.4	-	-	11.6	-	-
80.0 200.0	46.7	-	-	2.3	-	-	0.0	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	8.0	-	-	0.0	-	-
90.0 90.0	3.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 100.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0 120.0	2.5	-	-	9.0	-	-	14.8	-	-	0.0	-	-
90.0 140.0	0.0	-	-	25.0	-	-	0.0	-	-	5.6	-	-
90.0 160.0	0.0	-	-	0.0	-	-	5.9	-	-	8.9	-	-
90.0 180.0	11.8	-	-	34.6	-	-	0.0	-	-	0.0	-	-
90.0 200.0	6.2	-	-	10.1	-	-	0.0	-	-	0.0	-	-
93.0 50.0	-	0.0	-	0.0	-	-	3.0	-	-	3.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	-	-	-	0.0	-	-
93.0 70.0	-	3.0	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0 80.0	-	5.8	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	3.1	-	-	3.2	-	-
93.0 100.0	-	2.7	-	0.0	-	-	3.0	-	-	20.9	-	-
97.0 50.0	-	0.0	-	0.0	-	-	0.0	-	-	2.5	-	-
97.0 55.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 90.0	-	-	-	3.6	-	-	0.0	-	-	0.0	-	-
100.0 65.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0 70.0	3.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0 80.0	0.0	-	-	2.2	-	-	2.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	6.8	-	-	0.0	-	-	9.0	-	-
100.0 100.0	5.1	-	-	5.9	-	-	0.0	-	-	5.2	-	-
100.0 120.0	0.0	-	-	2.5	-	-	5.0	-	-	7.6	-	-



TABLE 4. (cont.)

*Diogenichthys atlanticus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 60.0	-	2.8	-	0.0	-	-	0.0	-	-	6.1	-	-
103.0 65.0	-	0.0	-	2.8	-	-	3.3	-	-	0.0	-	-
103.0 70.0	-	8.0	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0 80.0	-	5.5	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
107.0 45.0	-	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
107.0 60.0	-	5.8	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
107.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0 90.0	-	-	-	2.8	-	-	0.0	-	-	0.0	-	-
110.0 60.0	-	0.0	-	-	2.5	-	2.5	-	-	-	0.0	-
110.0 80.0	0.0	-	-	-	3.4	-	0.0	-	-	0.0	-	-
110.0 90.0	0.0	-	-	-	3.1	-	0.0	-	-	11.9	-	-
110.0 100.0	2.7	-	-	-	0.0	-	0.0	-	-	0.0	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	2.0	-	-
113.0 70.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	8.5	-	-
117.0 35.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
117.0 70.0	-	0.0	-	-	5.1	-	0.0	-	-	0.0	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	14.4	-	-
120.0 55.0	-	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
120.0 70.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
120.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0 100.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
120.0 120.0	-	0.0	-	-	0.0	-	2.4	-	-	-	0.0	-
130.0 120.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-

*Diogenichthys lateratus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0 70.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0 55.0	-	0.0	-	8.6	-	-	0.0	-	-	0.0	-	-
107.0 65.0	-	0.0	-	5.1	-	-	0.0	-	-	0.0	-	-
107.0 70.0	-	3.0	-	19.8	-	-	0.0	-	-	0.0	-	-
110.0 55.0	-	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
110.0 60.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	2.8	-	0.0	-	-	-	-	-
110.0 80.0	0.0	-	-	-	85.8	-	0.0	-	-	0.0	-	-
110.0 90.0	0.0	-	-	-	9.4	-	0.0	-	-	0.0	-	-
110.0 100.0	0.0	-	-	-	11.9	-	4.2	-	-	0.0	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	4.0	-	-
113.0 55.0	-	0.0	-	-	2.4	-	0.0	-	-	0.0	-	-
113.0 65.0	-	0.0	-	-	5.6	-	0.0	-	-	0.0	-	-
117.0 40.0	-	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Diogenichthys laternatus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0	60.0	15.0	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	65.0	3.2	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	70.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
117.0	80.0	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
120.0	50.0	0.0	-	-	0.0	-	0.0	-	-	5.7	2.2	-
120.0	55.0	14.0	-	-	2.1	-	0.0	-	-	-	0.0	-
120.0	90.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	100.0	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
123.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	60.0	0.0	-	-	2.9	-	0.0	-	-	-	2.6	-
123.0	65.0	0.0	-	-	2.7	-	0.0	-	-	-	2.9	-
123.0	70.0	-	-	-	0.0	-	5.4	-	-	-	0.0	-
123.0	80.0	-	-	-	0.0	-	16.6	-	-	-	0.0	-
127.0	40.0	0.0	-	-	5.8	-	0.0	-	-	-	0.0	-
127.0	45.0	14.6	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	55.0	35.8	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	60.0	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	70.0	-	-	-	2.7	-	0.0	-	-	-	5.2	-
127.0	80.0	-	-	-	0.0	-	0.0	-	-	-	6.7	-
130.0	40.0	10.8	-	-	3.5	-	0.0	-	-	-	0.0	-
130.0	45.0	30.3	-	-	3.0	-	0.0	-	-	-	0.0	-
130.0	50.0	4.9	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	70.0	46.9	-	-	8.2	-	0.0	-	-	-	0.0	-
130.0	80.0	5.5	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	90.0	19.5	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	100.0	59.0	-	-	10.3	-	0.0	-	-	-	7.3	-
130.0	120.0	48.8	-	-	27.7	-	54.1	-	-	-	12.4	-
133.0	35.0	26.2	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	40.0	18.6	-	-	3.1	-	8.5	-	-	-	-	-
133.0	45.0	6.1	-	-	5.9	-	0.0	-	-	-	0.0	-
133.0	50.0	42.1	-	-	10.6	-	2.6	-	-	-	0.0	-
133.0	55.0	14.3	-	-	11.6	-	0.0	-	-	-	5.8	-
133.0	60.0	0.0	-	-	5.8	-	7.9	-	-	-	3.0	-
133.0	65.0	-	-	-	5.6	-	0.0	-	-	-	9.2	-
133.0	80.0	-	-	-	22.9	-	29.9	-	-	-	-	-
137.0	30.0	0.0	-	-	0.0	-	0.0	-	-	-	44.0	-
137.0	35.0	8.6	-	-	0.0	-	0.0	-	-	-	42.1	-
137.0	40.0	21.2	-	-	0.0	-	0.0	-	-	-	19.0	-
137.0	45.0	17.2	-	-	11.1	-	0.0	-	-	-	0.0	-
137.0	50.0	41.1	-	-	0.0	-	0.0	-	-	-	5.6	-
137.0	55.0	30.0	-	-	0.0	-	47.3	-	-	-	5.4	-
137.0	60.0	2.4	-	-	0.0	-	12.6	-	-	-	14.2	-
137.0	70.0	14.7	-	-	0.0	-	2.7	-	-	-	0.0	-
137.0	80.0	7.8	-	-	14.4	-	-	-	-	-	0.0	-
140.0	40.0	-	-	-	-	-	-	-	-	-	2.4	-

TABLE 4. (cont.)

*Electrona rissoi*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 140.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
60.0 180.0	0.0	-	-	5.7	-	-	0.0	-	-	0.0	-	-
90.0 140.0	2.7	-	-	0.0	-	-	0.0	-	-	0.0	-	-

*Gonichthys tenuiculus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0 60.0	-	0.0	-	-	0.0	-	2.5	-	-	-	0.0	-
120.0 55.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 70.0	-	8.4	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 55.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 80.0	-	-	-	-	0.0	-	2.8	-	-	-	0.0	-
127.0 45.0	-	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 45.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
130.0 50.0	-	2.4	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 90.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	2.9	-	-	0.0	-	2.8	-	-	-	0.0	-
133.0 35.0	-	6.5	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	3.1	-
137.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
137.0 50.0	-	5.1	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 55.0	-	2.5	-	-	0.0	-	2.1	-	-	-	2.7	-
137.0 80.0	-	5.2	-	-	0.0	-	0.0	-	-	-	0.0	-

*Hygophum* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0 50.0	-	7.3	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 70.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0 80.0	-	0.0	-	-	0.0	-	8.1	-	-	-	0.0	-
133.0 65.0	-	-	-	-	0.0	-	2.7	-	-	-	0.0	-

*Hygophum atratum*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 70.0	-	5.8	-	-	0.0	-	0.0	-	-	0.0	-	-
120.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0 90.0	-	0.0	-	-	2.3	-	0.0	-	-	-	5.0	-
120.0 100.0	-	0.0	-	-	2.3	-	0.0	-	-	-	2.9	-
127.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	2.9	-
127.0 80.0	-	-	-	-	0.0	-	0.0	-	-	-	2.2	-
130.0 45.0	-	8.3	-	-	0.0	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Hygophum atratum* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0 55.0	-	0.0	-	-	0.0	-	3.4	-	-	-	0.0	-
130.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 90.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	5.7	-	-	2.8	-	2.8	-	-	-	0.0	-
133.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.8	-
137.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0 45.0	-	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 50.0	-	2.6	-	-	0.0	-	0.0	-	-	-	5.6	-
137.0 55.0	-	7.5	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0 60.0	-	0.0	-	-	0.0	-	5.3	-	-	-	0.0	-
137.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.2	-
137.0 80.0	-	2.6	-	-	0.0	-	0.0	-	-	-	2.6	-

*Hygophum reinhardtii*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	5.4	-	-
60.0 180.0	0.0	-	-	2.9	-	-	15.9	-	-	5.2	-	-
60.0 200.0	2.8	-	-	2.3	-	-	12.6	-	-	0.0	-	-
70.0 200.0	0.0	-	-	16.4	-	-	3.9	-	-	3.6	-	-
80.0 200.0	0.0	-	-	4.7	-	-	0.0	-	-	5.1	-	-
90.0 80.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	2.8	-	-
90.0 160.0	0.0	-	-	5.2	-	-	0.0	-	-	3.0	-	-
90.0 180.0	0.0	-	-	0.0	-	-	3.1	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	5.5	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	5.2	-	-
100.0 120.0	0.0	-	-	2.5	-	-	10.0	-	-	0.0	-	-
103.0 80.0	-	0.0	-	0.0	-	-	3.2	-	-	0.0	-	-
107.0 80.0	-	2.8	-	0.0	-	-	2.9	-	-	0.0	-	-
110.0 120.0	5.2	-	-	0.0	-	-	0.0	-	-	2.0	-	-
113.0 70.0	-	0.0	-	-	0.0	-	3.0	-	-	0.0	-	-
120.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 80.0	-	-	-	-	0.0	-	5.5	-	-	-	0.0	-
130.0 40.0	-	-	-	-	0.0	-	3.0	-	-	-	0.0	-
130.0 70.0	-	0.0	-	-	2.7	-	0.0	-	-	-	5.7	-
130.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	7.3	-
130.0 100.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.0	-
130.0 120.0	-	0.0	-	-	0.0	-	0.0	-	-	-	-	-
133.0 80.0	-	-	-	-	5.7	-	0.0	-	-	-	-	-

TABLE 4. (cont.)

*Loweina rara*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0 200.0	0.0	-	-	2.3	-	-	0.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	2.0	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.8	-	-
127.0 55.0	-	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 70.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	5.7	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 50.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-

*Myctophum nitidulum*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 200.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
80.0 200.0	2.5	-	-	0.0	-	-	0.0	-	-	5.1	-	-
90.0 120.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	2.8	-	-
90.0 160.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 180.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
93.0 70.0	-	0.0	-	0.0	-	-	-	-	-	3.2	-	-
93.0 100.0	-	0.0	-	0.0	-	-	0.0	-	-	9.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
100.0 80.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 100.0	0.0	-	-	0.0	-	-	2.3	-	-	5.2	-	-
100.0 120.0	0.0	-	-	0.0	-	-	2.5	-	-	2.5	-	-
103.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 70.0	-	0.0	-	0.0	-	-	6.2	-	-	0.0	-	-
107.0 70.0	-	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
107.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
110.0 60.0	-	0.0	-	-	0.0	-	2.5	-	-	0.0	0.0	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	2.1	0.0	-
110.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
110.0 80.0	2.9	-	-	-	6.9	-	0.0	-	-	2.8	-	-
110.0 100.0	2.7	-	-	-	0.0	-	6.3	-	-	4.0	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	2.9	-	-
113.0 80.0	-	0.0	-	-	0.0	-	0.0	-	-	5.7	-	-
113.0 90.0	-	-	-	-	3.0	-	0.0	-	-	0.0	-	-
117.0 65.0	-	0.0	-	-	0.0	-	0.0	-	-	5.4	-	-
117.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0 80.0	-	0.0	-	-	2.7	-	0.0	-	-	0.0	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	-	2.9	-
120.0 100.0	-	0.0	-	-	0.0	-	2.4	-	-	-	0.0	-
120.0 120.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 55.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Myctophum nitidulum* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
127.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
127.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	2.9	-
130.0 80.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
130.0 100.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-

*Protomyctophum crockeri*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	10.8	-	-
60.0 70.0	0.0	-	-	6.8	-	-	0.0	-	-	0.0	-	-
60.0 80.0	6.8	-	-	0.0	-	-	2.3	-	-	3.2	-	-
60.0 90.0	3.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 100.0	12.4	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 120.0	7.5	-	-	2.9	-	-	5.8	-	-	0.0	-	-
60.0 160.0	0.0	-	-	3.9	-	-	0.0	-	-	0.0	-	-
63.0 52.0	0.0	-	-	0.0	-	-	1.1	-	-	0.0	-	-
63.0 55.0	0.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
63.0 60.0	0.0	-	-	0.0	-	-	2.7	-	-	14.5	-	-
67.0 55.0	0.0	-	-	4.8	-	-	0.0	-	-	3.4	-	-
70.0 55.0	6.8	-	-	0.0	-	-	7.9	-	-	0.0	-	-
70.0 70.0	3.4	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 80.0	2.3	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	2.8	-	-	3.3	-	-
70.0 100.0	2.5	-	-	6.9	-	-	7.5	-	-	8.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0 200.0	2.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0 53.0	2.7	-	-	0.0	-	-	-	-	-	0.0	-	-
73.0 60.0	0.0	-	-	6.5	-	0.0	-	-	-	2.8	-	-
77.0 55.0	1.6	-	-	0.0	-	0.0	-	-	-	7.4	-	-
77.0 57.0	0.0	-	-	0.0	-	0.0	-	-	-	3.3	-	-
80.0 55.0	5.2	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 60.0	3.1	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	5.2	-	0.0	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	2.9	-	0.0	-	-	-	0.0	-	-
80.0 90.0	2.7	-	-	7.6	-	-	2.0	-	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
80.0 120.0	0.0	-	-	7.3	-	-	0.0	-	-	5.8	-	-
80.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
83.0 43.0	-	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
83.0 55.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
83.0 60.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
83.0 65.0	-	1.6	-	0.0	-	-	5.9	-	-	0.0	-	-
83.0 70.0	-	5.5	-	2.5	-	-	11.6	-	-	0.0	-	-

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	80.0	2.8	-	2.9	-	-	5.8	-	-	0.0	-	-
87.0	60.0	2.9	-	8.6	-	-	5.7	-	-	2.8	-	-
87.0	70.0	0.0	-	6.2	-	-	8.8	-	-	2.4	-	-
87.0	80.0	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
90.0	53.0	-	-	0.0	-	-	0.0	-	-	1.7	-	-
90.0	65.0	-	-	5.8	-	-	12.4	-	-	5.1	-	-
90.0	70.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	80.0	-	-	0.0	-	-	5.0	-	-	5.1	-	-
90.0	90.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
90.0	100.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0	120.0	-	-	6.7	-	-	0.0	-	-	0.0	-	-
90.0	160.0	-	-	1.7	-	-	0.0	-	-	3.0	-	-
90.0	200.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	35.0	2.6	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	45.0	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	55.0	2.8	-	0.0	-	-	0.0	-	-	3.1	-	-
93.0	60.0	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	65.0	0.0	-	11.7	-	-	-	-	-	6.1	-	-
93.0	70.0	12.2	-	3.7	-	-	-	-	-	3.2	-	-
93.0	80.0	2.9	-	3.3	-	-	0.0	-	-	2.9	-	-
93.0	90.0	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
93.0	100.0	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
97.0	32.0	2.5	-	0.0	-	-	2.7	-	-	0.0	-	-
97.0	40.0	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
97.0	45.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	50.0	0.0	-	5.6	-	-	0.0	-	-	2.5	-	-
97.0	55.0	-	-	0.0	-	-	0.0	-	-	11.4	-	-
97.0	60.0	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0	65.0	0.0	-	0.0	-	-	6.0	-	-	3.0	-	-
97.0	70.0	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
97.0	80.0	5.0	-	5.7	-	-	0.0	-	-	0.0	-	-
97.0	90.0	-	-	7.2	-	-	0.0	-	-	0.0	-	-
100.0	35.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
100.0	40.0	-	-	0.0	-	-	3.2	-	-	0.0	-	-
100.0	55.0	4.7	-	0.0	-	-	0.0	-	-	6.0	-	-
100.0	60.0	0.0	-	0.0	-	-	0.0	-	-	9.1	-	-
100.0	65.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	70.0	-	-	0.0	-	-	7.7	-	-	0.0	-	-
100.0	80.0	-	-	4.4	-	-	0.0	-	-	0.0	-	-
100.0	100.0	-	-	0.0	-	-	2.3	-	-	5.2	-	-
100.0	120.0	-	-	2.5	-	-	0.0	-	-	2.5	-	-
103.0	45.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0	50.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
103.0	60.0	2.8	-	0.0	-	-	0.0	-	-	6.1	-	-
103.0	65.0	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
103.0	70.0	0.0	-	2.9	-	-	0.0	-	-	5.9	-	-

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0	90.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0	32.0	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0	40.0	0.0	-	0.0	-	-	2.5	-	-	0.0	-	-
107.0	50.0	-	-	2.9	-	-	0.0	-	-	8.6	-	-
107.0	55.0	11.5	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0	60.0	2.9	-	5.9	-	-	0.0	-	-	0.0	-	-
107.0	65.0	8.7	-	2.6	-	-	0.0	-	-	0.0	-	-
107.0	70.0	0.0	-	0.0	-	-	0.0	-	-	11.6	-	-
107.0	80.0	0.0	-	5.1	-	-	0.0	-	-	2.9	-	-
110.0	35.0	0.0	-	-	5.3	-	2.2	-	-	-	0.0	-
110.0	45.0	6.7	-	27.4	2.7	-	0.0	-	-	-	0.0	-
110.0	55.0	0.0	-	2.5	2.5	-	0.0	-	-	-	3.2	-
110.0	60.0	0.0	-	2.8	2.8	-	0.0	-	-	-	0.0	-
110.0	65.0	0.0	-	0.0	0.0	-	0.0	-	-	4.2	0.0	-
110.0	70.0	0.0	-	24.0	24.0	-	0.0	-	-	0.0	-	-
110.0	80.0	-	-	9.4	9.4	-	0.0	-	-	3.0	-	-
110.0	90.0	-	-	2.5	2.5	-	0.0	-	-	0.0	-	-
110.0	120.0	0.0	-	-	2.7	-	0.0	-	-	0.0	-	-
113.0	35.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0	40.0	0.0	-	-	3.0	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	0.0	-	3.2	-	-	2.9	-	-
113.0	50.0	3.0	-	-	0.0	-	0.0	-	-	6.0	-	-
113.0	55.0	5.6	-	-	7.7	-	5.6	-	-	0.0	-	-
113.0	60.0	0.0	-	-	5.6	-	2.8	-	-	0.0	-	-
113.0	65.0	0.0	-	-	5.3	-	0.0	-	-	0.0	-	-
113.0	70.0	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	80.0	2.5	-	-	0.0	-	0.0	-	-	14.2	-	-
113.0	90.0	-	-	-	0.0	-	2.2	-	-	-	0.0	-
115.0	35.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
117.0	30.0	0.0	-	-	5.8	-	0.0	-	-	-	0.0	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	5.2	-	-
117.0	50.0	0.0	-	-	0.0	-	0.0	-	-	5.2	-	-
117.0	55.0	0.0	-	-	2.9	-	0.0	-	-	0.0	-	-
117.0	60.0	3.0	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	65.0	3.2	-	-	2.6	-	5.5	-	-	0.0	-	-
117.0	70.0	0.0	-	-	0.0	-	0.0	-	-	11.4	-	-
117.0	80.0	0.0	-	-	7.1	-	0.0	-	-	-	0.0	-
118.0	39.0	0.0	-	-	2.5	-	5.4	-	-	-	2.2	-
120.0	50.0	0.0	-	-	2.1	-	2.0	-	-	-	0.0	-
120.0	55.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	60.0	0.0	-	-	0.0	-	2.7	-	-	-	5.4	-
120.0	65.0	0.0	-	-	5.6	-	0.0	-	-	-	0.0	-
120.0	70.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	80.0	6.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	90.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	100.0	3.0	-	-	-	-	0.0	-	-	-	23.5	-



TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 120.0	-	2.9	-	-	0.0	-	0.0	-	-	-	7.0	-
123.0 42.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
123.0 45.0	-	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 50.0	-	3.1	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 55.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
123.0 80.0	-	-	-	-	0.0	-	8.3	-	-	-	0.0	-
127.0 34.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
127.0 40.0	-	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
127.0 45.0	-	2.9	-	-	2.5	-	0.0	-	-	-	0.0	-
127.0 50.0	-	0.0	-	-	0.0	-	5.8	-	-	-	2.8	-
127.0 60.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
127.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	5.7	-
127.0 80.0	-	-	-	-	2.4	-	0.0	-	-	-	0.0	-
130.0 35.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
130.0 40.0	-	0.0	-	-	13.8	-	0.0	-	-	-	0.0	-
130.0 50.0	-	2.4	-	-	0.0	-	0.0	-	-	-	3.4	-
130.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.0	-
130.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
130.0 80.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
130.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
130.0 100.0	-	8.4	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0 120.0	-	0.0	-	-	8.3	-	0.0	-	-	-	0.0	-
133.0 35.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
133.0 40.0	-	0.0	-	-	0.0	-	2.8	-	-	-	-	-
133.0 45.0	-	0.0	-	-	2.9	-	0.0	-	-	-	2.9	-
133.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	11.2	-
133.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
133.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	3.1	-
133.0 80.0	-	-	-	-	11.4	-	5.4	-	-	-	-	-
137.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
137.0 50.0	-	5.1	-	-	0.0	-	0.0	-	-	-	14.1	-
137.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	8.1	-
137.0 60.0	-	0.0	-	-	2.5	-	2.6	-	-	-	0.0	-
137.0 70.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
137.0 80.0	-	0.0	-	-	5.8	-	0.0	-	-	-	0.0	-

*Symbolophorus californiensis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 90.0	0.0	-	-	0.0	-	-	3.8	-	-	0.0	-	-
60.0 120.0	0.0	-	-	0.0	-	-	8.6	-	-	5.2	-	-
60.0 140.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	5.7	-	-	0.0	-	-	0.0	-	-
60.0 200.0	5.6	-	-	0.0	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Symbolophorus californiensis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 100.0	0.0	-	-	20.6	-	-	63.6	-	-	10.0	-	-
70.0 120.0	0.0	-	-	32.9	-	-	5.9	-	-	0.0	-	-
73.0 53.0	0.0	-	-	0.0	-	0.0	-	-	-	4.9	-	-
80.0 70.0	0.0	0.0	-	0.0	-	3.3	-	-	-	3.0	-	-
80.0 80.0	0.0	0.0	-	5.8	-	0.0	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	9.9	-	-	0.0	-	-
80.0 100.0	1.9	-	-	0.0	-	-	0.0	-	-	2.8	-	-
80.0 120.0	0.0	-	-	3.6	-	-	2.8	-	-	2.9	-	-
83.0 65.0	-	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	5.8	-	-	0.0	-	-
87.0 65.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0 70.0	-	0.0	-	3.1	-	-	2.9	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
87.0 90.0	-	-	-	2.8	-	-	3.0	-	-	5.5	-	-
90.0 60.0	-	-	-	0.0	-	-	2.6	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	5.3	-	-	0.0	-	-
90.0 120.0	0.0	-	-	17.9	-	-	3.0	-	-	0.0	-	-
90.0 140.0	0.0	-	-	10.0	-	-	0.0	-	-	0.0	-	-
90.0 160.0	0.0	-	-	1.7	-	-	0.0	-	-	0.0	-	-
90.0 180.0	0.0	-	-	5.3	-	-	0.0	-	-	0.0	-	-
93.0 55.0	-	0.0	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 70.0	-	3.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 80.0	-	0.0	-	0.0	-	-	18.8	-	-	0.0	-	-
93.0 90.0	-	3.0	-	0.0	-	-	0.0	-	-	6.4	-	-
93.0 100.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
97.0 55.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 70.0	-	0.0	-	2.7	-	-	3.1	-	-	0.0	-	-
97.0 80.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
97.0 90.0	-	-	-	10.8	-	-	0.0	-	-	0.0	-	-
100.0 90.0	0.0	-	-	4.5	-	-	0.0	-	-	1.5	-	-
100.0 100.0	0.0	-	-	14.8	-	-	0.0	-	-	0.0	-	-
100.0 120.0	8.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0 35.0	-	0.0	-	3.0	-	-	0.0	-	-	2.8	-	-
103.0 55.0	-	0.0	-	8.5	-	-	0.0	-	-	0.0	-	-
103.0 65.0	-	2.9	-	0.0	-	-	0.0	-	-	2.7	-	-
103.0 70.0	-	2.7	-	0.0	-	-	6.2	-	-	0.0	-	-
103.0 90.0	-	-	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0 40.0	-	0.0	-	0.0	-	-	2.5	-	-	0.0	-	-
107.0 50.0	-	-	-	2.9	-	-	0.0	-	-	0.0	-	-
107.0 55.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 60.0	-	2.9	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 70.0	-	0.0	-	0.0	-	-	6.3	-	-	0.0	-	-
110.0 40.0	-	0.0	-	-	2.0	-	0.0	-	-	-	0.0	-
110.0 60.0	-	0.0	-	-	0.0	-	2.5	-	-	-	0.0	-

TABLE 4. (cont.)

*Symbolophorus californiensis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	65.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
110.0	80.0	0.0	-	-	0.0	-	0.0	-	-	2.7	-	-
110.0	100.0	2.7	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	0.0	-	0.0	-	-	2.5	-	-
113.0	60.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0	65.0	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
117.0	40.0	0.0	-	-	8.7	-	0.0	-	-	-	0.0	-
117.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	3.2	-
117.0	65.0	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
120.0	55.0	0.0	-	-	10.4	-	0.0	-	-	0.0	0.0	-

*Tarletonbeania crenularis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	55.0	-	-	0.0	-	-	17.8	-	-	19.8	-	-
60.0	60.0	-	-	5.0	-	-	5.6	-	-	21.7	-	-
60.0	70.0	-	-	10.1	-	-	11.6	-	-	6.0	-	-
60.0	80.0	-	-	54.4	-	-	4.5	-	-	16.1	-	-
60.0	90.0	-	-	43.5	-	-	0.0	-	-	0.0	-	-
63.0	52.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	55.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
63.0	60.0	-	-	11.9	-	-	2.7	-	-	11.6	-	-
67.0	50.0	-	-	10.0	-	-	0.0	-	-	11.6	-	-
67.0	55.0	-	-	9.7	-	-	0.0	-	-	3.4	-	-
67.0	60.0	-	-	0.0	-	-	6.5	-	-	18.6	-	-
70.0	53.0	-	-	25.0	-	-	0.0	-	-	0.0	-	-
70.0	55.0	-	-	50.4	-	-	15.7	-	-	2.7	-	-
70.0	60.0	-	-	11.9	-	-	27.0	-	-	3.1	-	-
70.0	70.0	-	-	76.8	-	-	16.3	-	-	0.0	-	-
70.0	80.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0	90.0	-	-	0.0	-	-	0.0	-	-	3.3	-	-
70.0	100.0	-	-	0.0	-	-	0.0	-	-	4.0	-	-
70.0	120.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0	53.0	-	-	0.0	-	0.0	-	-	-	0.0	-	-
73.0	60.0	-	-	65.0	-	0.0	-	-	-	0.0	-	-
77.0	51.0	-	-	26.0	-	2.2	-	-	-	0.0	-	-
77.0	55.0	-	-	30.4	-	7.2	-	-	-	2.8	-	-
77.0	57.0	-	-	38.7	-	3.5	-	-	-	2.5	-	-
80.0	52.0	7.1	-	9.6	-	0.0	-	-	-	3.3	-	-
80.0	55.0	11.7	-	23.9	-	9.1	-	-	-	0.0	-	-
80.0	60.0	0.0	-	13.3	-	10.4	-	-	-	0.0	-	-
80.0	65.0	3.1	-	24.4	-	2.2	-	-	-	2.6	-	-
80.0	70.0	8.4	-	41.6	-	23.4	-	-	-	0.0	-	-
80.0	80.0	4.1	-	2.9	-	16.2	-	-	-	0.0	-	-
83.0	43.0	2.7	-	2.4	-	-	0.0	-	-	0.0	-	-
-	-	0.0	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Tarletonbeania crenularis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	55.0	6.2	14.0	0.0	-	-	0.0	-	-	0.0	-	-
83.0	60.0	2.6	0.0	0.0	-	-	3.0	-	-	6.1	-	-
83.0	65.0	1.6	0.0	0.0	-	-	20.5	-	-	0.0	-	-
83.0	70.0	2.8	12.4	0.0	-	-	5.8	-	-	0.0	-	-
83.0	80.0	0.0	55.7	0.0	-	-	5.8	-	-	0.0	-	-
83.0	90.0	-	5.8	0.0	-	-	2.9	-	-	0.0	-	-
87.0	45.0	0.0	0.0	0.0	-	-	0.0	-	-	2.8	-	-
87.0	50.0	2.5	0.0	0.0	-	-	0.0	-	-	0.0	-	-
87.0	55.0	0.0	3.0	0.0	-	-	8.6	-	-	0.0	-	-
87.0	60.0	0.0	14.3	0.0	-	-	0.0	-	-	0.0	-	-
87.0	65.0	0.0	24.3	0.0	-	-	2.9	-	-	0.0	-	-
87.0	70.0	0.0	15.4	0.0	-	-	5.9	-	-	0.0	-	-
87.0	80.0	0.0	3.3	0.0	-	-	0.0	-	-	0.0	-	-
87.0	90.0	-	2.8	0.0	-	-	0.0	-	-	0.0	-	-
90.0	28.0	-	2.5	0.0	-	-	0.0	-	-	0.0	-	-
90.0	32.0	-	0.0	0.0	-	-	0.0	-	-	2.2	-	-
90.0	37.0	-	0.0	0.0	-	-	3.9	-	-	0.0	-	-
90.0	53.0	2.3	4.3	2.2	-	-	8.1	-	-	0.0	-	-
90.0	60.0	0.0	2.9	0.0	-	-	0.0	-	-	0.0	-	-
90.0	65.0	-	0.0	0.0	-	-	2.7	-	-	0.0	-	-
90.0	70.0	0.0	0.0	2.8	-	-	2.6	-	-	0.0	-	-
90.0	90.0	0.0	13.9	2.9	-	-	8.0	-	-	0.0	-	-
90.0	100.0	0.0	0.0	0.0	-	-	5.4	-	-	0.0	-	-
93.0	30.0	0.0	0.0	0.0	-	-	16.7	-	-	0.0	-	-
93.0	35.0	0.0	0.0	0.0	-	-	6.2	-	-	3.0	-	-
93.0	45.0	0.0	0.0	0.0	-	-	3.0	-	-	0.0	-	-
93.0	50.0	0.0	0.0	0.0	-	-	3.1	-	-	0.0	-	-
93.0	55.0	0.0	0.0	7.3	-	-	-	-	-	0.0	-	-
93.0	60.0	0.0	3.3	3.3	-	-	6.1	-	-	0.0	-	-
93.0	70.0	0.0	0.0	0.0	-	-	6.3	-	-	0.0	-	-
93.0	80.0	0.0	0.0	0.0	-	-	0.0	-	-	2.1	-	-
93.0	90.0	0.0	0.0	0.0	-	-	3.0	-	-	0.0	-	-
97.0	30.0	0.0	0.0	0.0	-	-	14.7	-	-	0.0	-	-
97.0	40.0	0.0	3.0	3.0	-	-	3.1	-	-	0.0	-	-
97.0	45.0	-	0.0	0.0	-	-	3.3	-	-	0.0	-	-
97.0	55.0	0.0	0.0	0.0	-	-	3.0	-	-	0.0	-	-
97.0	60.0	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-
97.0	65.0	0.0	2.7	0.0	-	-	0.0	-	-	0.0	-	-
97.0	70.0	0.0	0.0	0.0	-	-	3.0	-	-	0.0	-	-
97.0	80.0	0.0	0.0	0.0	-	-	21.1	-	-	0.0	-	-
100.0	30.0	-	0.0	0.0	-	-	3.3	-	-	0.0	-	-
100.0	45.0	-	0.0	0.0	-	-	24.3	-	-	0.0	-	-
100.0	50.0	0.0	0.0	0.0	-	-	2.5	-	-	0.0	-	-
100.0	65.0	0.0	0.0	0.0	-	-	7.7	-	-	0.0	-	-
100.0	70.0	0.0	0.0	5.1	-	-	0.0	-	-	0.0	-	-
100.0	120.0	0.0	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Tarletonbeania crenularis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0 35.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
103.0 45.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 50.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
107.0 55.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0 60.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
113.0 65.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-

*Synodus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
117.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	15.2	-
118.0 39.0	-	0.0	-	-	0.0	-	0.0	-	-	-	89.6	-
119.0 33.0	-	0.0	-	-	-	-	0.0	-	-	-	4.1	-
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	6.0	-
120.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	11.0	-
120.0 55.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-
123.0 37.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.2	-
127.0 34.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.1	-
130.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	22.5	-
130.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	5.4	-
137.0 23.0	-	4.3	-	-	0.0	-	0.0	-	-	-	4.4	-
137.0 30.0	-	25.9	-	-	0.0	-	0.0	-	-	-	11.0	-
137.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
140.0 30.0	-	-	-	-	-	-	-	-	-	-	8.0	-

*Merluccius productus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 90.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
70.0 53.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 70.0	0.0	-	-	16.7	-	-	0.0	-	-	0.0	-	-
70.0 80.0	0.0	-	-	2.4	-	-	0.0	-	-	0.0	-	-
73.0 60.0	0.0	-	-	6.5	-	0.0	-	-	-	0.0	-	-
77.0 51.0	0.0	-	-	37.2	-	0.0	-	-	-	0.0	-	-
77.0 55.0	0.0	-	-	23.7	-	0.0	-	-	-	0.0	-	-
77.0 57.0	0.0	-	-	7.3	-	0.0	-	-	-	0.0	-	-
80.0 52.0	0.0	7.1	-	50.2	-	0.0	-	-	-	0.0	-	-
80.0 55.0	0.0	0.0	-	106.7	-	1.8	-	-	-	0.0	-	-
80.0 60.0	0.0	0.0	-	156.9	-	0.0	-	-	-	0.0	-	-
80.0 65.0	0.0	0.0	-	6.1	-	4.3	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	5.2	-	0.0	-	-	-	0.0	-	-

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	80.0	0.0	-	49.6	-	0.0	-	-	-	0.0	-	-
80.0	90.0	0.0	-	11.4	-	-	0.0	-	-	0.0	-	-
80.0	100.0	0.0	-	33.3	-	-	0.0	-	-	0.0	-	-
82.0	47.0	-	-	5.4	-	-	0.0	-	-	0.0	-	-
83.0	40.0	0.8	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	43.0	0.0	-	70.2	-	-	0.0	-	-	0.0	-	-
83.0	55.0	2.1	-	2.8	-	-	0.0	-	-	0.0	-	-
83.0	60.0	0.0	-	9.9	-	-	0.0	-	-	0.0	-	-
83.0	65.0	0.0	-	6.0	-	-	0.0	-	-	0.0	-	-
83.0	70.0	0.0	-	19.8	-	-	0.0	-	-	0.0	-	-
83.0	80.0	0.0	-	41.0	-	-	0.0	-	-	0.0	-	-
83.0	80.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
87.0	35.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
87.0	40.0	0.0	-	3.5	-	-	0.0	-	-	0.0	-	-
87.0	45.0	0.0	-	9.0	-	-	0.0	-	-	0.0	-	-
87.0	50.0	42.8	-	2.9	-	-	0.0	-	-	0.0	-	-
87.0	55.0	35.8	-	15.1	-	-	0.0	-	-	0.0	-	-
87.0	60.0	2045.1	-	76.9	-	-	0.0	-	-	0.0	-	-
87.0	65.0	26.6	-	85.1	-	-	0.0	-	-	0.0	-	-
87.0	70.0	138.2	-	43.1	-	-	0.0	-	-	0.0	-	-
87.0	80.0	37.6	-	9.8	-	-	0.0	-	-	0.0	-	-
87.0	90.0	-	-	37.0	-	-	0.0	-	-	0.0	-	-
90.0	28.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
90.0	32.0	5.4	-	5.1	-	-	0.0	-	-	0.0	-	-
90.0	37.0	2.1	-	14.8	-	-	0.0	-	-	0.0	-	-
90.0	45.0	0.0	-	11.0	-	-	0.0	-	-	0.0	-	-
90.0	53.0	0.0	-	23.4	-	-	0.0	-	-	0.0	-	-
90.0	60.0	0.0	-	8.8	-	-	0.0	-	-	0.0	-	-
90.0	65.0	0.0	-	17.5	-	-	0.0	-	-	0.0	-	-
90.0	70.0	0.0	-	8.4	-	-	0.0	-	-	0.0	-	-
90.0	90.0	0.0	-	36.4	-	-	0.0	-	-	0.0	-	-
90.0	100.0	0.0	-	25.1	-	-	0.0	-	-	0.0	-	-
93.0	28.0	10.9	-	9.1	-	-	0.0	-	-	0.0	-	-
93.0	30.0	0.0	-	23.2	-	-	0.0	-	-	0.0	-	-
93.0	35.0	0.0	-	14.9	-	-	0.0	-	-	0.0	-	-
93.0	40.0	2.8	-	14.9	-	-	0.0	-	-	0.0	-	-
93.0	45.0	2.8	-	2.9	-	-	0.0	-	-	0.0	-	-
93.0	50.0	0.0	-	7.1	-	-	0.0	-	-	0.0	-	-
93.0	55.0	0.0	-	10.0	-	-	0.0	-	-	0.0	-	-
93.0	60.0	0.0	-	37.4	-	-	0.0	-	-	0.0	-	-
93.0	65.0	0.0	-	20.4	-	-	-	-	-	0.0	-	-
93.0	70.0	0.0	-	3.7	-	-	-	-	-	0.0	-	-
97.0	30.0	2.1	-	23.4	-	-	0.0	-	-	0.0	-	-
97.0	32.0	40.8	-	12.6	-	-	0.0	-	-	0.0	-	-
97.0	35.0	0.0	-	6.1	-	-	0.0	-	-	0.0	-	-
97.0	40.0	0.0	-	26.0	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0	45.0	2.6	-	14.9	-	-	0.0	-	-	0.0	-	-
97.0	50.0	0.0	-	11.2	-	-	0.0	-	-	0.0	-	-
97.0	55.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	65.0	21.8	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	80.0	2.5	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	60.7	-	-	0.0	-	-	0.0	-	-
100.0	35.0	-	-	101.2	-	-	0.0	-	-	0.0	-	-
100.0	40.0	-	-	44.6	-	-	0.0	-	-	0.0	-	-
100.0	45.0	-	-	9.6	-	-	0.0	-	-	0.0	-	-
100.0	50.0	-	-	8.9	-	-	0.0	-	-	0.0	-	-
100.0	55.0	-	-	5.5	-	-	0.0	-	-	0.0	-	-
100.0	70.0	-	-	2.6	-	-	0.0	-	-	0.0	-	-
103.0	35.0	-	-	32.5	-	-	0.0	-	-	0.0	-	-
103.0	40.0	4.7	-	18.8	-	-	0.0	-	-	0.0	-	-
103.0	45.0	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
103.0	50.0	0.0	-	8.6	-	-	0.0	-	-	0.0	-	-
107.0	32.0	173.3	-	20.4	-	-	0.0	-	-	0.0	-	-
107.0	35.0	50.2	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0	40.0	6.1	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0	33.0	57.8	-	-	7.1	-	0.0	-	-	-	2.9	-
110.0	35.0	392.5	-	-	8.0	-	0.0	-	-	-	0.0	-
110.0	45.0	111.5	-	-	18.7	-	0.0	-	-	-	0.0	-
113.0	30.0	18.3	-	-	0.0	-	-	-	-	0.0	-	-
113.0	35.0	49.6	-	-	2.7	-	0.0	-	-	0.0	-	-
113.0	40.0	35.5	-	-	12.8	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	8.9	-	0.0	-	-	0.0	-	-
117.0	26.0	0.0	-	-	6.6	-	0.0	-	-	0.0	0.0	-
117.0	30.0	139.4	-	-	2.5	-	0.0	-	-	-	0.0	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
117.0	45.0	3.2	-	-	0.0	-	0.0	-	-	-	0.0	-
118.0	33.0	9.3	-	-	0.0	-	0.0	-	-	-	0.0	-
119.0	39.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	25.0	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	30.0	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0	35.0	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0	40.0	0.0	-	-	1.2	-	0.0	-	-	-	0.0	-
120.0	45.0	0.0	-	-	15.6	-	0.0	-	-	-	0.0	-
120.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
120.0	55.0	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
120.0	60.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
120.0	65.0	0.0	-	-	16.2	-	0.0	-	-	-	0.0	-
123.0	37.0	60.7	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	42.0	20.4	-	-	12.0	-	0.0	-	-	-	0.0	-
123.0	45.0	3.0	-	-	2.6	-	0.0	-	-	-	0.0	-
123.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
127.0	34.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
127.0 40.0	-	9.7	-	-	2.9	-	0.0	-	-	-	0.0	-
130.0 35.0	-	5.0	-	-	5.9	-	0.0	-	-	-	0.0	-
130.0 40.0	-	13.5	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 30.0	-	94.0	-	-	0.0	-	0.0	-	-	-	-	-
133.0 35.0	-	533.0	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 23.0	-	6.5	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 30.0	-	248.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 35.0	-	486.7	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 40.0	-	92.0	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 45.0	-	45.8	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 50.0	-	7.7	-	-	0.0	-	0.0	-	-	-	0.0	-

## Macrouridae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
67.0 55.0	0.0	-	-	-	-	-	0.0	-	-	3.4	-	-
70.0 55.0	2.3	-	-	-	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	-	-	-	0.0	-	-	3.1	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-

## Ophidiiformes

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 60.0	0.0	-	-	-	-	-	3.9	-	-	0.0	-	-
73.0 53.0	0.0	-	-	-	-	8.3	-	-	-	0.0	-	-
73.0 60.0	0.0	-	-	-	-	32.4	-	-	-	0.0	-	-
77.0 55.0	0.0	-	-	-	-	1.8	-	-	-	0.0	-	-
80.0 55.0	0.0	0.0	-	-	-	1.8	-	-	-	0.0	-	-
82.0 47.0	-	0.0	-	-	-	-	0.0	-	-	0.0	-	-
83.0 43.0	-	0.0	-	-	-	-	0.0	-	-	0.0	-	-
90.0 28.0	-	-	-	-	-	-	0.0	-	-	0.0	-	-
93.0 35.0	0.0	0.0	-	-	-	-	0.0	-	-	0.0	-	-
93.0 80.0	-	0.0	-	-	-	-	0.0	-	-	0.0	-	-
110.0 35.0	-	0.0	-	-	2.7	-	0.0	-	-	0.0	0.0	-
120.0 40.0	-	0.0	-	-	1.2	-	0.0	-	-	-	0.0	-
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
123.0 37.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-
123.0 42.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
127.0 70.0	-	-	-	-	0.0	-	2.8	-	-	-	0.0	-



TABLE 4. (cont.)

*Chilara taylori*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
73.0 60.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-	-
77.0 57.0	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-	-
83.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	5.8	-	-
87.0 35.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
87.0 45.0	-	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
87.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
93.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
113.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	2.5	-	-
117.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.2	-
120.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.2	-

*Ophidion scrippsae*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	1.7	-
137.0 23.0	-	0.0	-	-	0.0	-	0.0	-	-	-	8.8	-

*Porichthys* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 25.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-

*Ceratioidei*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	8.1	-	-
60.0 180.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
70.0 200.0	2.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	5.8	-	-
90.0 160.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	2.0	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	5.8	-	-
118.0 39.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.1	-
120.0 55.0	-	0.0	-	-	0.0	-	2.0	-	-	-	0.0	-
120.0 100.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
120.0 120.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.3	-
133.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	3.1	-
137.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-

TABLE 4. (cont.)

## Gobiesocidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
103.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-

## Exocoetidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
127.0 40.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
133.0 40.0	-	0.0	-	-	0.0	-	2.8	-	-	-	-	-

*Cololabis saira*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0 55.0	0.0	0.0	-	1.8	-	0.0	-	-	-	0.0	-	-
87.0 60.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
87.0 80.0	-	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 53.0	0.0	-	-	0.0	-	-	0.0	-	-	1.7	-	-
93.0 45.0	-	0.0	-	0.0	-	-	5.6	-	-	0.0	-	-
93.0 50.0	-	0.0	-	0.0	-	-	9.4	-	-	0.0	-	-
93.0 65.0	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	6.7	-	-	0.0	-	-
113.0 70.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
120.0 65.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
123.0 70.0	-	-	-	-	2.5	-	0.0	-	-	-	0.0	-

## Trachipteridae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 120.0	3.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0 60.0	2.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 53.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 100.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
77.0 55.0	1.6	-	-	0.0	-	0.0	-	-	-	0.0	-	-
77.0 57.0	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 70.0	2.1	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	2.9	-	4.0	-	-	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	8.8	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 60.0	-	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
87.0 70.0	-	0.0	-	3.1	-	-	2.9	-	-	0.0	-	-

TABLE 4. (cont.)

## Trachipteridae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 60.0	0.0	-	-	0.0	-	-	2.6	-	-	0.0	-	-
90.0 80.0	2.4	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	3.0	-	-
93.0 70.0	-	0.0	-	0.0	-	-	-	-	-	3.2	-	-
97.0 30.0	-	0.0	-	0.0	-	-	1.5	-	-	0.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
100.0 80.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
110.0 55.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 70.0	-	3.6	-	-	0.0	-	0.0	-	-	0.0	-	-

*Melamphaes* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 100.0	0.0	-	-	3.8	-	-	1.8	-	-	0.0	-	-
60.0 120.0	1.9	-	-	2.9	-	-	5.8	-	-	0.0	-	-
60.0 140.0	0.0	-	-	2.6	-	-	0.0	-	-	0.0	-	-
60.0 160.0	0.0	-	-	7.8	-	-	2.8	-	-	0.0	-	-
60.0 180.0	2.6	-	-	11.5	-	-	4.5	-	-	0.0	-	-
60.0 200.0	0.0	-	-	2.3	-	-	4.2	-	-	0.0	-	-
70.0 80.0	0.0	-	-	4.8	-	-	3.7	-	-	0.0	-	-
70.0 90.0	0.0	-	-	9.6	-	-	2.8	-	-	0.0	-	-
70.0 100.0	0.0	-	-	3.4	-	-	3.7	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
70.0 200.0	2.9	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0 53.0	0.0	-	-	4.4	-	0.0	-	-	-	0.0	-	-
80.0 65.0	0.0	0.0	-	0.0	-	2.2	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	11.2	-	-	2.8	-	-
80.0 120.0	0.0	-	-	7.3	-	-	0.0	-	-	2.9	-	-
80.0 200.0	2.5	-	-	2.3	-	-	5.6	-	-	2.6	-	-
83.0 60.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 65.0	-	0.0	-	9.1	-	-	2.9	-	-	0.0	-	-
87.0 70.0	-	0.0	-	3.1	-	-	11.8	-	-	0.0	-	-
87.0 80.0	-	0.0	-	9.8	-	-	2.8	-	-	0.0	-	-
90.0 70.0	-	-	-	0.0	-	-	15.9	-	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 90.0	2.4	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0 100.0	0.0	-	-	8.4	-	-	7.7	-	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	11.8	-	-	0.0	-	-
90.0 140.0	0.0	-	-	2.5	-	-	0.0	-	-	2.8	-	-
90.0 180.0	0.0	-	-	0.0	-	-	6.2	-	-	0.0	-	-

TABLE 4. (cont.)

*Melamphaes* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 200.0	0.0	-	-	10.1	-	-	0.0	-	-	0.0	-	-
93.0 45.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
93.0 60.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
93.0 65.0	-	2.9	-	2.9	-	-	-	-	-	0.0	-	-
93.0 80.0	-	2.9	-	3.3	-	-	0.0	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	6.3	-	-	0.0	-	-
93.0 100.0	-	0.0	-	0.0	-	-	6.1	-	-	0.0	-	-
97.0 35.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0 45.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 55.0	-	-	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 90.0	-	-	-	3.6	-	-	0.0	-	-	0.0	-	-
100.0 55.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0 80.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
100.0 90.0	0.0	-	-	4.5	-	-	5.5	-	-	0.0	-	-
100.0 100.0	0.0	-	-	5.9	-	-	0.0	-	-	0.0	-	-
100.0 120.0	2.7	-	-	5.1	-	-	0.0	-	-	0.0	-	-
103.0 45.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 50.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
103.0 55.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0 60.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
103.0 70.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0 80.0	-	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
107.0 35.0	-	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
107.0 60.0	-	0.0	-	3.0	-	-	2.8	-	-	2.9	-	-
107.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
110.0 45.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
110.0 55.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	5.5	-	0.0	-	-	2.1	-	-
110.0 100.0	0.0	-	-	-	7.5	-	4.2	-	-	2.8	-	-
110.0 120.0	99.6	-	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0 65.0	-	0.0	-	-	0.0	-	5.7	-	-	0.0	-	-
113.0 70.0	-	0.0	-	-	2.6	-	3.0	-	-	0.0	-	-
113.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.8	-	-
117.0 70.0	-	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
117.0 80.0	-	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0 90.0	-	-	-	-	0.0	-	0.0	-	-	2.9	-	-
120.0 50.0	-	0.0	-	-	0.0	-	5.4	-	-	-	0.0	-
120.0 70.0	-	0.0	-	-	5.6	-	0.0	-	-	-	0.0	-
120.0 90.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0 100.0	-	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 80.0	-	-	-	-	2.7	-	5.5	-	-	-	0.0	-
127.0 70.0	-	0.0	-	-	1.7	-	0.0	-	-	-	0.0	-
130.0 40.0	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Melamphaes* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
130.0 90.0	-	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
130.0 100.0	-	5.6	-	-	0.0	-	0.0	-	-	-	2.4	-
130.0 120.0	-	0.0	-	-	11.1	-	0.0	-	-	-	0.0	-
133.0 50.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 80.0	-	-	-	-	0.0	-	2.7	-	-	-	-	-
137.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0 60.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
137.0 70.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-

*Poromitra* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	2.9	-	-	0.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	5.6	-	-	0.0	-	-
60.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0 100.0	0.0	-	-	0.0	-	-	11.2	-	-	0.0	-	-
77.0 55.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-	-
80.0 90.0	0.0	-	-	0.0	-	-	2.0	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	2.7	-	-	0.0	-	-
90.0 180.0	4.7	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
97.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0 90.0	0.0	-	-	2.6	3.1	-	0.0	-	-	0.0	-	-

*Scopeloberyx robustus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0 200.0	0.0	-	-	0.0	-	-	7.8	-	-	0.0	-	-
90.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	3.0	-	-
90.0 180.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-

*Scopelogadus bispinosus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 120.0	0.0	-	-	0.0	-	-	5.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
80.0 80.0	0.0	0.0	-	0.0	-	2.0	-	-	-	0.0	-	-
80.0 100.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	5.8	-	-
80.0 200.0	0.0	-	-	2.3	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Scopelogadus bispinosus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0 55.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
87.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
90.0 160.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
100.0 80.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
107.0 55.0	-	0.0	-	2.9	-	-	0.0	-	-	2.9	-	-
110.0 80.0	0.0	-	-	-	3.4	-	0.0	-	-	0.0	-	-
120.0 100.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
123.0 65.0	-	-	-	-	0.0	-	0.0	-	-	-	3.0	-
123.0 80.0	-	-	-	-	0.0	-	2.8	-	-	-	0.0	-
137.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-

*Macroramphosus gracilis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
110.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	2.1	-	-
130.0 90.0	-	0.0	-	-	4.1	-	0.0	-	-	-	0.0	-

*Syngnathus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 55.0	2.3	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 60.0	3.4	-	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
115.0 35.0	-	0.0	-	-	-	-	15.5	-	-	-	-	-
119.0 33.0	-	0.0	-	-	-	-	7.8	-	-	-	4.1	-

## Agonidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	3.6	-	-	0.0	-	-	5.7	-	-
103.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-

## Cottidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	7.1	-	-	0.0	-	-	0.0	-	-
83.0 51.0	-	2.5	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0 90.0	-	-	-	2.9	-	-	0.0	-	-	0.0	-	-
87.0 50.0	-	0.0	-	2.9	-	-	22.3	-	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	4.3	-	-	0.0	-	-

TABLE 4. (cont.)

## Cottidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0 32.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
120.0 40.0	-	0.0	-	-	0.0	-	1.2	-	-	-	0.0	-
130.0 30.0	-	4.7	-	-	0.0	-	0.0	-	-	0.0	0.0	-
133.0 35.0	-	0.0	-	-	0.0	-	5.7	-	-	-	2.8	-

*Scorpaenichthys marmoratus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
67.0 50.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0 55.0	9.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
80.0 52.0	0.0	4.7	-	0.0	-	0.0	-	-	-	0.0	-	-

## Cyκλοpteridae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	3.6	-	-	1.1	-	-	0.0	-	-
67.0 50.0	0.0	-	-	1.7	-	-	0.0	-	-	0.0	-	-
70.0 55.0	0.0	-	-	0.0	-	-	3.9	-	-	0.0	-	-
83.0 51.0	-	0.0	-	0.0	-	-	3.6	-	-	0.0	-	-
87.0 50.0	-	0.0	-	0.0	-	-	16.2	-	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	2.1	-	-	0.0	-	-
110.0 33.0	-	0.0	-	-	7.1	-	0.0	-	-	-	0.0	-

*Oxylebius pictus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 60.0	0.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
73.0 60.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 55.0	2.6	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
90.0 60.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
117.0 35.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-

*Zaniolepis* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0 50.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	3.1	-	-

TABLE 4. (cont.)

*Scorpaena* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0	30.0	-	-	0.0	-	-	1.5	-	-	0.0	-	-
115.0	35.0	-	-	0.0	-	-	2.2	-	-	-	-	-
117.0	35.0	-	-	-	0.0	-	3.2	-	-	-	0.0	-
117.0	45.0	-	-	-	0.0	-	0.0	-	-	-	3.2	-
119.0	33.0	-	-	-	-	-	5.8	-	-	-	0.0	-
127.0	40.0	-	-	-	0.0	-	5.5	-	-	-	0.0	-
127.0	45.0	-	-	-	0.0	-	5.7	-	-	-	0.0	-
127.0	55.0	-	-	-	0.0	-	23.3	-	-	-	0.0	-
127.0	60.0	-	-	-	0.0	-	2.8	-	-	-	0.0	-
130.0	45.0	-	-	-	0.0	-	9.8	-	-	-	0.0	-
133.0	45.0	-	-	-	0.0	-	3.0	-	-	-	0.0	-

*Sebastes* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	52.0	-	-	0.0	-	-	0.0	-	-	2.2	-	-
60.0	55.0	-	-	48.8	-	-	0.0	-	-	11.6	-	-
60.0	60.0	-	-	0.0	-	-	3.7	-	-	13.6	-	-
60.0	70.0	-	-	0.0	-	-	48.7	-	-	0.0	-	-
60.0	80.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
60.0	90.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	52.0	-	-	1.8	-	-	11.3	-	-	82.6	-	-
63.0	55.0	-	-	26.6	-	-	267.9	-	-	152.3	-	-
63.0	60.0	-	-	15.9	-	-	8.0	-	-	0.0	-	-
67.0	50.0	-	-	34.9	-	-	2.2	-	-	46.6	-	-
67.0	55.0	-	-	33.9	-	-	5.5	-	-	61.9	-	-
67.0	60.0	-	-	6.9	-	-	0.0	-	-	0.0	-	-
70.0	53.0	-	-	25.0	-	-	6.0	-	-	40.8	-	-
70.0	55.0	-	-	55.4	-	-	27.5	-	-	59.0	-	-
70.0	60.0	-	-	14.9	-	-	7.7	-	-	27.8	-	-
70.0	70.0	-	-	33.4	-	-	3.3	-	-	2.9	-	-
70.0	80.0	-	-	0.0	-	-	11.1	-	-	0.0	-	-
70.0	90.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0	53.0	-	-	8.8	-	63.5	-	-	-	24.6	-	-
73.0	60.0	-	-	19.5	-	49.7	-	-	-	11.3	-	-
77.0	51.0	-	-	55.8	-	5.4	-	-	-	19.9	-	-
77.0	55.0	-	-	72.7	-	1.8	-	-	-	0.0	-	-
77.0	57.0	-	-	16.9	-	7.1	-	-	-	0.0	-	-
80.0	52.0	-	-	23.9	-	6.3	-	-	-	54.7	-	-
80.0	55.0	-	-	5.5	-	3.6	-	-	-	9.5	-	-
80.0	60.0	-	-	16.0	-	6.9	-	-	-	25.4	-	-
80.0	65.0	-	-	54.9	-	4.3	-	-	-	13.0	-	-
80.0	70.0	-	-	5.2	-	0.0	-	-	-	3.0	-	-
80.0	80.0	-	-	0.0	-	0.0	-	-	-	0.0	-	-
82.0	47.0	-	-	8.1	-	-	2.8	-	-	10.4	-	-



TABLE 4. (cont.)

## Sebastes spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	40.0	12.1	-	4.8	-	-	0.0	-	-	0.0	-	-
83.0	43.0	66.0	-	36.3	-	-	5.9	-	-	45.2	-	-
83.0	51.0	225.7	-	6.2	-	-	14.3	-	-	23.7	-	-
83.0	55.0	82.8	-	8.4	-	-	3.0	-	-	8.9	-	-
83.0	60.0	104.0	-	12.4	-	-	3.0	-	-	3.0	-	-
83.0	65.0	0.0	-	26.8	-	-	5.9	-	-	0.0	-	-
83.0	70.0	0.0	-	7.4	-	-	5.8	-	-	0.0	-	-
83.0	80.0	0.0	-	52.7	-	-	2.9	-	-	0.0	-	-
83.0	90.0	-	-	87.3	-	-	0.0	-	-	0.0	-	-
87.0	35.0	3.2	-	15.3	-	-	0.0	-	-	8.1	-	-
87.0	40.0	10.3	-	24.1	-	-	0.0	-	-	20.3	-	-
87.0	45.0	2.7	-	21.0	-	-	5.6	-	-	34.2	-	-
87.0	50.0	241.9	-	8.8	-	-	0.0	-	-	18.0	-	-
87.0	55.0	77.0	-	3.0	-	-	5.7	-	-	5.8	-	-
87.0	60.0	58.6	-	0.0	-	-	11.4	-	-	0.0	-	-
87.0	65.0	20.7	-	3.0	-	-	0.0	-	-	0.0	-	-
87.0	70.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
87.0	80.0	5.8	-	6.5	-	-	0.0	-	-	0.0	-	-
90.0	28.0	-	-	9.9	-	-	4.3	-	-	0.0	-	-
90.0	32.0	-	-	38.1	-	-	0.0	-	-	2.2	-	-
90.0	37.0	-	-	14.8	-	-	3.9	-	-	0.0	-	-
90.0	45.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0	53.0	-	-	2.1	-	-	5.4	-	-	0.0	-	-
90.0	60.0	-	-	2.2	-	-	5.2	-	-	0.0	-	-
90.0	65.0	-	-	2.9	-	-	8.2	-	-	0.0	-	-
90.0	80.0	-	-	5.8	-	-	0.0	-	-	0.0	-	-
90.0	90.0	-	-	11.2	-	-	0.0	-	-	0.0	-	-
93.0	28.0	24.5	-	12.2	-	-	2.8	-	-	10.5	-	-
93.0	30.0	5.5	-	8.7	-	-	2.7	-	-	0.0	-	-
93.0	35.0	148.8	-	9.0	-	-	0.0	-	-	0.0	-	-
93.0	40.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
93.0	45.0	2.8	-	2.9	-	-	2.8	-	-	0.0	-	-
93.0	50.0	0.0	-	28.6	-	-	6.2	-	-	3.0	-	-
93.0	55.0	0.0	-	13.4	-	-	3.0	-	-	0.0	-	-
93.0	60.0	0.0	-	5.8	-	-	12.3	-	-	0.0	-	-
93.0	65.0	0.0	-	8.8	-	-	-	-	-	0.0	-	-
93.0	70.0	0.0	-	18.4	-	-	-	-	-	0.0	-	-
93.0	80.0	0.0	-	6.7	-	-	0.0	-	-	0.0	-	-
97.0	30.0	17.0	-	2.6	-	-	2.9	-	-	8.3	-	-
97.0	32.0	30.6	-	9.5	-	-	0.0	-	-	0.0	-	-
97.0	35.0	0.0	-	15.3	-	-	0.0	-	-	0.0	-	-
97.0	40.0	0.0	-	14.5	-	-	3.0	-	-	0.0	-	-
97.0	45.0	0.0	-	23.9	-	-	20.5	-	-	0.0	-	-
97.0	50.0	0.0	-	5.6	-	-	0.0	-	-	0.0	-	-
97.0	60.0	17.9	-	5.7	-	-	3.3	-	-	0.0	-	-
97.0	65.0	15.6	-	6.1	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Sebastes spp. (cont.)*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0	70.0			2.7			0.0			0.0		
97.0	80.0	0.0		0.0			0.0			0.0		
100.0	30.0	2.5		77.3			0.0			2.3		
100.0	35.0			8.4			0.0			2.8		
100.0	40.0			0.0			6.5			0.0		
100.0	45.0			5.7			3.3			0.0		
100.0	50.0			3.0			4.4			0.0		
100.0	55.0			2.8			0.0			0.0		
100.0	60.0			2.5			0.0			0.0		
100.0	70.0			2.6			2.6			0.0		
103.0	30.0	6.7		6.5			2.7			6.2		
103.0	35.0	0.0		26.6			0.0			0.0		
103.0	40.0	0.0		9.4			0.0			0.0		
103.0	45.0	0.0		5.8			0.0			0.0		
103.0	50.0	0.0		17.2			0.0			0.0		
103.0	80.0	0.0		2.7			0.0			0.0		
107.0	32.0	19.3		43.8			0.0			2.9		
107.0	35.0	3.0		0.0			0.0			5.6		
107.0	40.0	0.0		0.0			0.0			0.0		
107.0	45.0	0.0		13.6			0.0			0.0		
107.0	60.0	0.0		5.9			0.0			0.0		
107.0	65.0	0.0		2.6			0.0			0.0		
107.0	70.0	0.0		7.4			0.0			0.0		
110.0	33.0	21.7			23.6		0.0			2.9		
110.0	35.0	8.0			13.3		0.0			0.0		
110.0	40.0	0.0			8.0		0.0			0.0		
110.0	45.0	2.2			0.0		0.0			0.0		
110.0	65.0	0.0			2.8		0.0			0.0		
113.0	30.0	10.5			16.2		0.0			0.0		
113.0	35.0	0.0			24.4		0.0			0.0		
113.0	40.0	0.0			7.7		0.0			0.0		
113.0	45.0	0.0			11.9		0.0			0.0		
115.0	35.0	0.0					8.8					
117.0	26.0	0.0			2.2		0.0				0.0	
117.0	30.0	79.7			2.5		2.8				0.0	
117.0	35.0	32.1			0.0		0.0				0.0	
117.0	40.0	40.9			31.8		0.0				0.0	
117.0	45.0	9.5			2.7		0.0				0.0	
117.0	55.0	0.0			2.5		0.0			0.0		
117.0	60.0	0.0			5.8		2.9			0.0		
118.0	39.0	80.3			9.4		0.0				3.1	
119.0	33.0	2.8					0.0				0.0	
120.0	25.0	2.2			0.0		0.0				0.0	
120.0	30.0	16.5			4.8		0.0				0.0	
120.0	35.0	0.0			16.7		0.0				0.0	
120.0	40.0	2.5			2.9		0.0				0.0	

TABLE 4. (cont.)

*Sebastes* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 45.0	-	0.0	-	-	57.2	-	0.0	-	-	-	0.0	-
120.0 50.0	-	0.0	-	-	48.3	-	0.0	-	-	-	0.0	-
120.0 55.0	-	0.0	-	-	71.1	-	0.0	-	-	-	0.0	-
120.0 60.0	-	0.0	-	-	19.5	-	0.0	-	-	-	0.0	-
120.0 65.0	-	0.0	-	-	9.2	-	0.0	-	-	-	0.0	-
123.0 37.0	-	58.0	-	-	18.9	-	0.0	-	-	-	2.6	-
123.0 42.0	-	2.9	-	-	12.0	-	6.2	-	-	-	0.0	-
123.0 45.0	-	3.0	-	-	18.3	-	3.2	-	-	-	0.0	-
127.0 34.0	-	15.6	-	-	31.8	-	0.0	-	-	-	0.0	-
127.0 40.0	-	35.5	-	-	5.8	-	0.0	-	-	-	0.0	-
127.0 45.0	-	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0 50.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
127.0 55.0	-	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
130.0 35.0	-	10.1	-	-	11.8	-	0.0	-	-	-	0.0	-
130.0 40.0	-	0.0	-	-	1.7	-	3.0	-	-	-	0.0	-
130.0 120.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
133.0 30.0	-	96.6	-	-	0.0	-	0.0	-	-	-	-	-
133.0 35.0	-	209.3	-	-	2.9	-	0.0	-	-	-	0.0	-
133.0 45.0	-	0.0	-	-	8.8	-	0.0	-	-	-	2.9	-
133.0 55.0	-	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
137.0 30.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 35.0	-	2.9	-	-	2.3	-	0.0	-	-	-	0.0	-
137.0 40.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-

*Sebastolobus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 90.0	0.0	-	-	4.8	-	-	0.0	-	-	0.0	-	-
80.0 60.0	0.0	0.0	-	2.7	-	0.0	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	0.0	-	6.1	-	-	-	0.0	-	-
82.0 47.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-

*Prionotus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0 30.0	-	0.0	-	0.0	-	-	1.5	-	-	0.0	-	-
120.0 25.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	6.0	-
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	2.7	-
133.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-

TABLE 4. (cont.)

*Prionotus* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
133.0 60.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
137.0 23.0	-	0.0	-	-	0.0	-	0.0	-	-	-	57.3	-
137.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	19.3	-
137.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
140.0 30.0	-	-	-	-	-	-	-	-	-	-	10.7	-

## Blennioidei

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0 51.0	-	0.0	-	2.1	-	-	0.0	-	-	0.0	-	-

*Hypsoblennius* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
67.0 50.0	0.0	-	-	0.0	-	-	2.2	-	-	0.0	-	-
83.0 40.0	-	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
83.0 43.0	-	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
87.0 40.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
90.0 28.0	0.0	-	-	0.0	-	-	19.3	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	2.9	-	-	2.1	-	-
103.0 30.0	-	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
107.0 45.0	-	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
133.0 25.0	-	-	-	0.0	0.0	-	0.0	-	-	-	2.7	-
133.0 35.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-

## Clinidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	3.6	-	-	0.0	-	-	0.0	-	-
77.0 51.0	0.0	-	-	1.9	-	0.0	-	-	-	0.0	-	-
82.0 47.0	-	8.6	-	5.4	-	-	0.0	-	-	0.0	-	-
87.0 50.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	4.3	-	-	0.0	-	-
93.0 28.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
97.0 32.0	-	2.5	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
123.0 37.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 23.0	-	0.0	-	-	0.0	-	0.0	-	-	-	1.5	-

TABLE 4. (cont.)

## Gobiidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	52.0	0.0	-	0.0	-	-	0.0	-	-	2.2	-	-
67.0	55.0	-	-	0.0	-	-	0.0	-	-	3.4	-	-
70.0	53.0	0.0	-	0.0	-	-	0.0	-	-	2.5	-	-
70.0	60.0	0.0	-	0.0	-	-	0.0	-	-	3.1	-	-
73.0	53.0	0.0	-	0.0	-	1.4	-	-	-	0.0	-	-
80.0	52.0	2.4	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0	65.0	0.0	-	0.0	-	0.0	-	-	-	2.6	-	-
82.0	47.0	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0	51.0	2.5	-	0.0	-	-	3.6	-	-	0.0	-	-
83.0	55.0	2.1	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	65.0	0.0	-	0.0	-	-	2.9	-	-	2.8	-	-
87.0	50.0	2.5	-	0.0	-	-	2.0	-	-	0.0	-	-
93.0	50.0	0.0	-	0.0	-	-	3.1	-	-	3.0	-	-
97.0	40.0	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
97.0	45.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	55.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-
103.0	30.0	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
103.0	35.0	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
107.0	32.0	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	2.4	-	0.0	-	-	0.0	0.0	-
110.0	35.0	0.0	-	-	2.7	-	0.0	-	-	-	3.5	-
120.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
120.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	2.2	-
123.0	42.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
130.0	30.0	0.0	-	-	2.2	-	0.0	-	-	0.0	0.0	-

*Icosteus aenigmaticus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-

*Halichoeres* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0	90.0	-	-	0.0	-	-	3.0	-	-	0.0	-	-
113.0	30.0	0.0	-	-	0.0	-	-	-	-	2.6	-	-
115.0	35.0	0.0	-	-	-	-	2.2	-	-	-	-	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	9.1	-
118.0	39.0	0.0	-	-	0.0	-	0.0	-	-	-	9.3	-
120.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	6.0	-
120.0	50.0	0.0	-	-	0.0	-	2.7	-	-	-	4.4	-
123.0	37.0	0.0	-	-	0.0	-	0.0	-	-	-	5.2	-
130.0	30.0	0.0	-	-	0.0	-	0.0	-	-	-	5.0	-
137.0	23.0	0.0	-	-	0.0	-	0.0	-	-	-	1.5	-

TABLE 4. (cont.)

*Halichoeres* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
140.0	30.0	-	-	-	-	-	-	-	-	-	5.4	-

*Oxyjulis californica*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	60.0	0.0	-	0.0	-	-	0.0	-	-	6.1	-	-
83.0	65.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0	35.0	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
87.0	40.0	0.0	-	0.0	-	-	5.8	-	-	5.8	-	-
87.0	70.0	0.0	-	0.0	-	-	0.0	-	-	2.4	-	-
93.0	50.0	0.0	-	0.0	-	-	6.2	-	-	0.0	-	-
93.0	55.0	0.0	-	0.0	-	-	9.0	-	-	0.0	-	-
93.0	65.0	0.0	-	20.4	-	-	-	-	-	0.0	-	-
97.0	30.0	0.0	-	0.0	-	-	38.2	-	-	0.0	-	-
100.0	30.0	-	-	0.0	-	-	48.2	-	-	0.0	-	-
100.0	60.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
100.0	90.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
103.0	30.0	0.0	-	0.0	-	-	2.7	-	-	0.0	-	-
103.0	45.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
107.0	32.0	0.0	-	0.0	-	-	4.0	-	-	0.0	-	-
110.0	33.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
110.0	35.0	0.0	-	-	0.0	-	0.0	-	-	3.5	-	-
113.0	90.0	-	-	-	0.0	-	0.0	-	-	5.7	-	-
117.0	60.0	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
120.0	90.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
127.0	34.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
137.0	40.0	2.4	-	-	0.0	-	0.0	-	-	-	0.0	-

*Semicossyphus pulcher*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0	28.0	-	-	0.0	-	-	2.1	-	-	0.0	-	-
97.0	30.0	0.0	-	0.0	-	-	1.5	-	-	0.0	-	-
100.0	30.0	-	-	0.0	-	-	6.0	-	-	0.0	-	-
123.0	45.0	0.0	-	-	0.0	-	6.3	-	-	-	0.0	-
123.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
127.0	34.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-

*Chromis punctipinnis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	30.0	-	-	-	0.0	-	-	-	-	2.6	-	-
113.0	50.0	0.0	-	-	0.0	-	0.0	-	-	2.9	-	-

TABLE 4. (cont.)

*Chromis punctipinnis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
123.0 37.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.2	-

<i>Howella brodiei</i>												
STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
60.0 120.0	0.0	-	-	0.0	-	-	5.8	-	-	0.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	8.5	-	-	0.0	-	-
60.0 160.0	0.0	-	-	0.0	-	-	5.7	-	-	0.0	-	-
60.0 180.0	0.0	-	-	2.9	-	-	4.5	-	-	0.0	-	-
60.0 200.0	0.0	-	-	2.3	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0 120.0	0.0	-	-	0.0	-	-	4.4	-	-	0.0	-	-
83.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.7	-	-
90.0 45.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
90.0 120.0	0.0	-	-	0.0	-	-	8.9	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 160.0	0.0	-	-	1.7	-	-	0.0	-	-	0.0	-	-
90.0 180.0	0.0	-	-	2.7	-	-	0.0	-	-	0.0	-	-
103.0 70.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-

*Brama* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 160.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 180.0	0.0	-	-	0.0	-	-	6.8	-	-	2.6	-	-
60.0 200.0	2.8	-	-	4.6	-	-	0.0	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
80.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 180.0	0.0	-	-	2.7	-	-	0.0	-	-	2.5	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
100.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
110.0 90.0	0.0	-	-	-	0.0	-	0.0	-	-	3.0	-	-
110.0 120.0	0.0	-	-	-	0.0	-	0.0	-	-	2.0	-	-
117.0 80.0	-	0.0	-	-	2.7	-	0.0	-	-	5.7	-	-
120.0 120.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
123.0 65.0	-	0.0	-	-	0.0	-	3.0	-	-	-	0.0	-
123.0 80.0	-	-	-	-	0.0	-	2.8	-	-	-	0.0	-
130.0 80.0	-	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-

TABLE 4. (cont.)

*Seriola lalandi*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 60.0	-	0.0	-	-	0.0	-	5.9	-	-	0.0	-	-
123.0 45.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
123.0 60.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
127.0 65.0	-	-	-	-	0.0	-	2.4	-	-	-	0.0	-
130.0 60.0	-	0.0	-	-	0.0	-	5.6	-	-	-	0.0	-

*Trachurus symmetricus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 100.0	0.0	-	-	0.0	-	-	1.8	-	-	0.0	-	-
60.0 120.0	0.0	-	-	2.9	-	-	2.9	-	-	0.0	-	-
60.0 140.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
60.0 160.0	0.0	-	-	35.0	-	-	0.0	-	-	0.0	-	-
70.0 80.0	0.0	-	-	12.1	-	-	3.7	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	8.5	-	-	0.0	-	-
70.0 100.0	0.0	-	-	44.7	-	-	63.6	-	-	0.0	-	-
70.0 120.0	0.0	-	-	125.6	-	-	3.0	-	-	0.0	-	-
80.0 60.0	0.0	0.0	-	0.0	-	3.5	-	-	-	0.0	-	-
80.0 65.0	0.0	0.0	-	0.0	-	4.3	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	0.0	-	73.5	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	38.0	-	40.4	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	243.2	-	-	5.9	-	-	0.0	-	-
80.0 100.0	0.0	-	-	20.0	-	-	0.0	-	-	0.0	-	-
80.0 120.0	0.0	-	-	105.6	-	-	0.0	-	-	0.0	-	-
83.0 60.0	-	0.0	-	0.0	-	-	44.8	-	-	0.0	-	-
83.0 65.0	-	0.0	-	3.0	-	-	55.7	-	-	0.0	-	-
83.0 70.0	-	0.0	-	0.0	-	-	14.5	-	-	0.0	-	-
83.0 80.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 40.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
87.0 60.0	-	0.0	-	0.0	-	-	11.4	-	-	0.0	-	-
87.0 65.0	-	0.0	-	3.0	-	-	23.5	-	-	0.0	-	-
87.0 70.0	-	0.0	-	0.0	-	-	32.3	-	-	0.0	-	-
87.0 75.0	-	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 28.0	0.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
90.0 60.0	0.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
90.0 70.0	0.0	-	-	2.8	-	-	2.7	-	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 90.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
90.0 100.0	0.0	-	-	16.7	-	-	0.0	-	-	0.0	-	-
90.0 120.0	0.0	-	-	31.4	-	-	0.0	-	-	0.0	-	-
90.0 140.0	0.0	-	-	60.0	-	-	0.0	-	-	0.0	-	-
93.0 45.0	-	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
93.0 50.0	-	0.0	-	0.0	-	-	12.5	-	-	0.0	-	-
93.0 55.0	-	0.0	-	3.3	-	-	23.9	-	-	0.0	-	-
93.0 60.0	-	0.0	-	0.0	-	-	101.3	-	-	0.0	-	-
93.0 65.0	-	0.0	-	8.8	-	-	-	-	-	0.0	-	-



TABLE 4. (cont.)

*Trachurus symmetricus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
93.0	80.0	-	-	6.7	-	-	3.1	-	-	0.0	-	-
93.0	90.0	0.0	-	9.6	-	-	3.1	-	-	0.0	-	-
93.0	100.0	0.0	-	6.6	-	-	0.0	-	-	0.0	-	-
97.0	30.0	0.0	-	0.0	-	-	1.5	-	-	0.0	-	-
97.0	32.0	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
97.0	35.0	0.0	-	6.1	-	-	0.0	-	-	0.0	-	-
97.0	40.0	0.0	-	2.9	-	-	3.0	-	-	0.0	-	-
97.0	45.0	0.0	-	14.9	-	-	0.0	-	-	0.0	-	-
97.0	50.0	0.0	-	5.6	-	-	0.0	-	-	0.0	-	-
97.0	55.0	-	-	3.0	-	-	3.1	-	-	0.0	-	-
97.0	65.0	0.0	-	9.1	-	-	8.9	-	-	0.0	-	-
97.0	70.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
97.0	80.0	0.0	-	2.8	-	-	9.1	-	-	0.0	-	-
100.0	30.0	-	-	1.8	-	-	0.0	-	-	0.0	-	-
100.0	40.0	0.0	-	4.7	-	-	0.0	-	-	0.0	-	-
100.0	45.0	0.0	-	0.0	-	-	6.6	-	-	0.0	-	-
100.0	50.0	0.0	-	145.5	-	-	4.4	-	-	0.0	-	-
100.0	55.0	0.0	-	22.0	-	-	3.0	-	-	0.0	-	-
100.0	60.0	0.0	-	17.9	-	-	0.0	-	-	0.0	-	-
100.0	65.0	0.0	-	7.9	-	-	0.0	-	-	0.0	-	-
100.0	70.0	0.0	-	5.2	-	-	0.0	-	-	0.0	-	-
100.0	90.0	0.0	-	6.8	-	-	0.0	-	-	0.0	-	-
100.0	100.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
103.0	40.0	0.0	-	0.0	-	-	5.7	-	-	0.0	-	-
103.0	45.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
103.0	50.0	0.0	-	2.9	-	-	6.0	-	-	0.0	-	-
103.0	55.0	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
103.0	60.0	0.0	-	23.3	-	-	0.0	-	-	0.0	-	-
103.0	65.0	0.0	-	50.2	-	-	10.0	-	-	0.0	-	-
103.0	70.0	0.0	-	34.3	-	-	3.1	-	-	0.0	-	-
103.0	80.0	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
103.0	90.0	0.0	-	19.3	-	-	0.0	-	-	0.0	-	-
107.0	32.0	0.0	-	5.8	-	-	4.0	-	-	0.0	-	-
107.0	40.0	0.0	-	6.1	-	-	0.0	-	-	0.0	-	-
107.0	45.0	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
107.0	50.0	-	-	8.6	-	-	2.8	-	-	0.0	-	-
107.0	55.0	0.0	-	5.8	-	-	0.0	-	-	0.0	-	-
107.0	60.0	0.0	-	163.4	-	-	0.0	-	-	0.0	-	-
107.0	65.0	0.0	-	48.8	-	-	0.0	-	-	0.0	-	-
107.0	70.0	0.0	-	12.4	-	-	0.0	-	-	0.0	-	-
107.0	90.0	-	-	38.8	-	-	0.0	-	-	0.0	-	-
110.0	40.0	0.0	-	-	4.0	-	0.0	-	-	-	0.0	-
110.0	45.0	0.0	-	-	24.0	-	0.0	-	-	-	0.0	-
110.0	50.0	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
110.0	55.0	0.0	-	-	106.3	-	12.7	-	-	-	0.0	-
110.0	60.0	0.0	-	-	142.8	-	17.3	-	-	-	0.0	-

TABLE 4. (cont.)

*Trachurus symmetricus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	65.0	0.0	-	-	72.8	-	3.9	-	-	-	0.0	-
110.0	70.0	0.0	-	-	90.8	-	0.0	-	-	0.0	-	-
110.0	80.0	-	-	-	10.3	-	0.0	-	-	0.0	-	-
110.0	90.0	0.0	-	-	31.4	-	0.0	-	-	0.0	-	-
110.0	100.0	0.0	-	-	44.5	-	0.0	-	-	0.0	-	-
110.0	120.0	-	-	-	22.4	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	3.0	-	0.0	-	-	0.0	-	-
113.0	60.0	0.0	-	-	0.0	-	8.4	-	-	0.0	-	-
113.0	65.0	0.0	-	-	11.3	-	2.8	-	-	0.0	-	-
113.0	70.0	0.0	-	-	7.9	-	0.0	-	-	0.0	-	-
113.0	80.0	0.0	-	-	5.6	-	0.0	-	-	0.0	-	-
117.0	35.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
117.0	40.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-
117.0	60.0	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0	65.0	0.0	-	-	5.9	-	11.3	-	-	0.0	-	-
117.0	70.0	0.0	-	-	43.5	-	0.0	-	-	0.0	-	-
117.0	80.0	0.0	-	-	13.3	-	0.0	-	-	0.0	-	-
120.0	35.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
120.0	45.0	0.0	-	-	5.2	-	0.0	-	-	-	0.0	-
120.0	50.0	0.0	-	-	7.6	-	0.0	-	-	-	0.0	-
120.0	55.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	60.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
120.0	65.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	90.0	0.0	-	-	32.5	-	0.0	-	-	-	0.0	-
120.0	100.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	120.0	0.0	-	-	38.4	-	0.0	-	-	-	0.0	-
123.0	45.0	0.0	-	-	7.9	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	2.5	-	0.0	-	-	-	0.0	-
123.0	80.0	-	-	-	5.4	-	0.0	-	-	-	0.0	-
127.0	55.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
127.0	70.0	-	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0	50.0	0.0	-	-	10.1	-	0.0	-	-	-	0.0	-
130.0	60.0	0.0	-	-	3.9	-	0.0	-	-	-	0.0	-
133.0	45.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-

*Girella nigricans*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0	35.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
97.0	30.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
107.0	50.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
120.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
127.0	34.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-

TABLE 4. (cont.)

*Medialuna californiensis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0 65.0	-	0.0	-	0.0	-	-	11.7	-	-	0.0	-	-
97.0 40.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
110.0 60.0	-	0.0	-	-	0.0	-	2.5	-	-	-	0.0	-
120.0 50.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-

*Caulolatilus princeps*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
123.0 45.0	-	0.0	-	-	0.0	-	6.3	-	-	-	0.0	-
133.0 35.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
137.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-

## Sciaenidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0 52.0	0.0	16.6	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 55.0	10.4	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
83.0 40.0	-	0.0	-	1.6	-	-	0.0	-	-	5.7	-	-
90.0 28.0	1.8	-	-	2.5	-	-	77.0	-	-	0.0	-	-
93.0 40.0	-	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	11.8	-	-	25.0	-	-
100.0 30.0	0.0	-	-	0.0	-	-	12.0	-	-	0.0	-	-
103.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
107.0 32.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
110.0 35.0	-	5.3	-	-	0.0	-	0.0	-	-	0.0	0.0	-
117.0 26.0	-	0.0	-	-	0.0	-	5.2	-	-	-	0.0	-
117.0 30.0	-	0.0	-	-	0.0	-	2.8	-	-	-	3.0	-
120.0 25.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-
120.0 45.0	-	0.0	-	-	5.2	-	0.0	-	-	-	0.0	-
123.0 37.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-
127.0 34.0	-	2.6	-	-	0.0	-	0.0	-	-	-	2.5	-
130.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 23.0	-	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
137.0 30.0	-	0.0	-	-	0.0	-	6.5	-	-	-	0.0	-
140.0 30.0	-	-	-	-	0.0	-	3.0	-	-	-	0.0	-
					-	-	-	-	-	-	21.4	-

## Serranidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0 40.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-

TABLE 4. (cont.)

## Serranidae (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 28.0	0.0	-	-	0.0	-	-	6.4	-	-	0.0	-	-
117.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
118.0 39.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.1	-
127.0 50.0	-	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
130.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.0	-
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	5.4	-
133.0 35.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.5	-
137.0 30.0	-	0.0	-	-	0.0	-	17.8	-	-	-	0.0	-
140.0 30.0	-	-	-	-	-	-	-	-	-	-	5.4	-

## Gempylidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 180.0	0.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
70.0 200.0	0.0	-	-	0.0	-	-	0.0	-	-	1.8	-	-
90.0 140.0	0.0	-	-	0.0	-	-	0.0	-	-	2.8	-	-
90.0 200.0	0.0	-	-	2.0	-	-	2.8	-	-	0.0	-	-
130.0 100.0	-	0.0	-	-	0.0	-	2.3	-	-	-	0.0	-
137.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	-	5.2	-

## Scombridae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0 30.0	-	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
117.0 35.0	-	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
133.0 30.0	-	0.0	-	-	0.0	-	2.7	-	-	-	-	-

*Sarda chiliensis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
115.0 35.0	-	0.0	-	-	-	-	2.2	-	-	-	-	-
130.0 50.0	-	0.0	-	-	3.4	-	0.0	-	-	-	0.0	-
133.0 35.0	-	42.5	-	-	0.0	-	25.5	-	-	-	0.0	-
133.0 40.0	-	0.0	-	-	0.0	-	5.6	-	-	-	-	-
137.0 30.0	-	0.0	-	-	0.0	-	3.0	-	-	-	0.0	-
137.0 50.0	-	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-

*Scomber japonicus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	0.0	-	-	0.0	-	-	9.3	-	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	2.1	-	-	0.0	-	-

TABLE 4. (cont.)

*Scomber japonicus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 32.0	0.0	-	-	0.0	-	-	3.8	-	-	0.0	-	-
90.0 37.0	0.0	-	-	3.7	-	-	0.0	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	10.3	-	-	0.0	-	-
97.0 32.0	-	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
107.0 32.0	-	0.0	-	0.0	-	-	14.1	-	-	0.0	-	-
107.0 40.0	-	0.0	-	0.0	-	-	2.5	-	-	0.0	-	-
110.0 35.0	-	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
110.0 40.0	-	0.0	-	-	4.0	-	0.0	-	-	-	0.0	-
110.0 45.0	-	0.0	-	-	8.0	-	0.0	-	-	-	0.0	-
110.0 60.0	-	0.0	-	-	5.1	-	0.0	-	-	-	0.0	-
113.0 40.0	-	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
117.0 35.0	-	0.0	-	-	5.3	-	0.0	-	-	-	0.0	-
117.0 40.0	-	0.0	-	-	14.5	-	0.0	-	-	-	0.0	-
120.0 40.0	-	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0 45.0	-	0.0	-	-	10.4	-	0.0	-	-	-	0.0	-
120.0 50.0	-	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
123.0 42.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
123.0 45.0	-	0.0	-	-	2.6	-	3.2	-	-	-	0.0	-
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	2.7	-
133.0 35.0	-	13.1	-	-	0.0	-	0.0	-	-	-	5.5	-
137.0 23.0	-	17.4	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 30.0	-	0.0	-	-	0.0	-	5.9	-	-	-	0.0	-

*Scomberomorus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
133.0 30.0	-	7.8	-	-	0.0	-	0.0	-	-	-	-	-

## Trichiuridae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
103.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.8	-	-
113.0 45.0	-	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
120.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
120.0 50.0	-	0.0	-	-	0.0	-	0.0	-	-	-	4.4	-
127.0 40.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
130.0 60.0	-	0.0	-	-	0.0	-	5.6	-	-	-	0.0	-
137.0 35.0	-	20.2	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 40.0	-	23.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0 45.0	-	0.0	-	-	0.0	-	3.3	-	-	-	0.0	-

TABLE 4. (cont.)

*Sphyraena argentea*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
90.0 28.0	0.0	-	-	0.0	-	-	2.1	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	33.8	-	-	0.0	-	-
107.0 32.0	-	0.0	-	0.0	-	-	10.1	-	-	0.0	-	-
115.0 35.0	-	0.0	-	-	-	-	2.2	-	-	-	-	-
117.0 30.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
133.0 25.0	-	-	-	-	0.0	-	2.6	-	-	-	0.0	-

*Icichthys lockingtoni*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 70.0	0.0	-	-	0.0	-	-	0.0	-	-	2.0	-	-
60.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
63.0 52.0	1.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0 60.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
70.0 70.0	0.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
70.0 80.0	0.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0 90.0	2.5	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	4.0	-	-
77.0 55.0	1.6	-	-	0.0	-	0.0	-	-	-	0.0	-	-
77.0 57.0	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-	-
80.0 60.0	0.0	0.0	-	0.0	-	6.9	-	-	-	0.0	-	-
80.0 65.0	0.0	0.0	-	0.0	-	6.5	-	-	-	0.0	-	-
80.0 70.0	0.0	0.0	-	2.6	-	10.0	-	-	-	0.0	-	-
80.0 80.0	0.0	0.0	-	5.8	-	4.0	-	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	2.0	-	-	0.0	-	-
83.0 43.0	-	0.0	-	2.4	-	-	0.0	-	-	0.0	-	-
83.0 65.0	-	0.0	-	0.0	-	-	14.7	-	-	0.0	-	-
83.0 80.0	-	0.0	-	2.9	-	-	8.8	-	-	0.0	-	-
87.0 55.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
87.0 60.0	-	5.9	-	0.0	-	-	5.7	-	-	0.0	-	-
87.0 65.0	-	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0 65.0	0.0	-	-	0.0	-	-	4.1	-	-	0.0	-	-
90.0 80.0	4.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
90.0 100.0	0.0	-	-	5.6	-	-	0.0	-	-	0.0	-	-
93.0 80.0	-	0.0	-	0.0	-	-	6.1	-	-	0.0	-	-
97.0 50.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
100.0 45.0	0.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
100.0 50.0	0.0	-	-	0.0	-	-	4.4	-	-	0.0	-	-
100.0 55.0	0.0	-	-	2.8	-	-	0.0	-	-	0.0	-	-
100.0 60.0	0.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	2.8	-	0.0	-	-	0.0	-	-
123.0 65.0	-	-	-	-	2.7	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Peprilus simillimus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
123.0 55.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
133.0 45.0	-	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-

*Tetragonurus cuvieri*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 55.0	3.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	1.7	-	-
60.0 160.0	0.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
60.0 180.0	0.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
70.0 70.0	0.0	-	-	3.3	-	-	0.0	-	-	0.0	-	-
70.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	3.3	-	-
70.0 120.0	0.0	-	-	0.0	-	-	1.5	-	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	0.0	-	-	12.8	-	-
80.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	11.0	-	-
80.0 120.0	0.0	-	-	0.0	-	-	0.0	-	-	8.7	-	-
80.0 200.0	0.0	-	-	0.0	-	-	2.8	-	-	0.0	-	-
87.0 60.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
87.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
90.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	5.1	-	-
90.0 70.0	0.0	-	-	0.0	-	-	0.0	-	-	4.8	-	-
90.0 100.0	0.0	-	-	0.0	-	-	2.6	-	-	6.5	-	-
90.0 120.0	0.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
90.0 140.0	0.0	-	-	0.0	-	-	2.5	-	-	0.0	-	-
90.0 160.0	0.0	-	-	1.7	-	-	0.0	-	-	0.0	-	-
90.0 180.0	0.0	-	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 65.0	-	0.0	-	0.0	-	-	-	-	-	3.1	-	-
93.0 70.0	-	0.0	-	3.7	-	-	-	-	-	0.0	-	-
93.0 90.0	-	0.0	-	0.0	-	-	0.0	-	-	6.4	-	-
93.0 100.0	-	0.0	-	0.0	-	-	0.0	-	-	6.0	-	-
97.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	8.0	-	-
97.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	17.9	-	-
97.0 70.0	-	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
97.0 90.0	-	-	-	0.0	-	-	0.0	-	-	2.9	-	-
100.0 50.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
100.0 65.0	0.0	-	-	0.0	-	-	0.0	-	-	7.6	-	-
100.0 100.0	0.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
103.0 50.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
103.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	6.1	-	-
103.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
107.0 55.0	-	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
110.0 65.0	-	0.0	-	-	0.0	-	1.9	-	-	-	0.0	-
110.0 70.0	-	0.0	-	-	0.0	-	0.0	-	-	2.1	-	-
113.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	7.5	-	-
113.0 65.0	-	0.0	-	-	0.0	-	0.0	-	-	6.0	-	-

TABLE 4. (cont.)

*Tetragonurus cuvieri* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0	90.0	-	-	-	0.0	-	0.0	-	-	2.8	-	-
117.0	50.0	0.0	-	-	0.0	-	0.0	-	-	2.6	-	-
120.0	80.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
137.0	80.0	0.0	-	-	0.0	-	2.7	-	-	-	2.6	-

## Chiasmodontidae

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0	90.0	-	-	0.0	-	-	5.9	-	-	0.0	-	-
93.0	90.0	0.0	-	3.2	-	-	0.0	-	-	0.0	-	-
97.0	90.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
100.0	90.0	-	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0	100.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
107.0	65.0	0.0	-	2.6	-	-	0.0	-	-	0.0	-	-
107.0	70.0	3.0	-	0.0	-	-	0.0	-	-	0.0	-	-
110.0	55.0	0.0	-	-	0.0	-	3.2	-	-	-	0.0	-
113.0	60.0	0.0	-	-	2.6	-	0.0	-	-	0.0	-	-
113.0	90.0	-	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	65.0	0.0	-	-	0.0	-	2.8	-	-	0.0	-	-
120.0	70.0	2.9	-	-	0.0	-	0.0	-	-	2.7	-	-
123.0	80.0	-	-	-	2.8	-	2.8	-	-	-	0.0	-
127.0	60.0	0.0	-	-	2.5	-	2.8	-	-	-	0.0	-
130.0	60.0	0.0	-	-	7.8	-	0.0	-	-	-	0.0	-
130.0	70.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0	100.0	0.0	-	-	0.0	-	0.0	-	-	-	2.4	-
133.0	35.0	3.3	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	55.0	0.0	-	-	0.0	-	2.7	-	-	-	0.0	-
137.0	50.0	2.6	-	-	0.0	-	0.0	-	-	-	2.8	-
137.0	55.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-

## Pleuronectiformes

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	70.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
120.0	25.0	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-

*Citharichthys* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	55.0	-	-	0.0	-	-	0.0	-	-	1.6	-	-
60.0	60.0	-	-	0.0	-	-	0.0	-	-	13.6	-	-
63.0	55.0	2.4	-	0.0	-	-	0.0	-	-	0.0	-	-



TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0	53.0	4.9	-	0.0	-	-	0.0	-	-	7.7	-	-
70.0	55.0	0.0	-	0.0	-	-	0.0	-	-	8.0	-	-
70.0	60.0	6.8	-	0.0	-	-	0.0	-	-	9.3	-	-
77.0	57.0	0.0	-	0.0	-	3.5	-	-	-	0.0	-	-
80.0	52.0	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0	60.0	0.0	-	2.7	-	0.0	-	-	-	0.0	-	-
80.0	65.0	0.0	-	0.0	-	0.0	-	-	-	7.8	-	-
80.0	70.0	0.0	-	0.0	-	6.7	-	-	-	0.0	-	-
82.0	47.0	2.9	-	0.0	-	-	0.0	-	-	10.4	-	-
83.0	40.0	0.8	-	0.0	-	-	0.0	-	-	1.4	-	-
83.0	43.0	0.0	-	0.0	-	-	2.9	-	-	6.8	-	-
83.0	51.0	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0	55.0	0.0	-	0.0	-	-	3.0	-	-	11.9	-	-
83.0	60.0	0.0	-	0.0	-	-	0.0	-	-	3.0	-	-
83.0	65.0	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
83.0	70.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
87.0	35.0	0.0	-	0.0	-	-	0.0	-	-	5.7	-	-
87.0	40.0	0.0	-	0.0	-	-	0.0	-	-	16.3	-	-
87.0	45.0	0.0	-	0.0	-	-	0.0	-	-	8.7	-	-
87.0	50.0	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
87.0	55.0	0.0	-	0.0	-	-	0.0	-	-	4.5	-	-
90.0	28.0	0.0	-	0.0	-	-	2.1	-	-	5.8	-	-
90.0	32.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
90.0	37.0	0.0	-	0.0	-	-	0.0	-	-	8.8	-	-
90.0	70.0	0.0	-	2.8	-	-	0.0	-	-	3.6	-	-
93.0	28.0	2.7	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	30.0	2.8	-	0.0	-	-	2.7	-	-	5.3	-	-
93.0	40.0	2.8	-	0.0	-	-	0.0	-	-	2.8	-	-
93.0	45.0	0.0	-	0.0	-	-	2.8	-	-	5.1	-	-
97.0	30.0	2.1	-	0.0	-	-	13.2	-	-	33.3	-	-
97.0	32.0	0.0	-	0.0	-	-	2.7	-	-	8.0	-	-
97.0	35.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
97.0	55.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	1.8	-	-	0.0	-	-	13.8	-	-
100.0	35.0	-	-	5.6	-	-	0.0	-	-	0.0	-	-
100.0	40.0	-	-	0.0	-	-	3.2	-	-	0.0	-	-
100.0	70.0	-	-	0.0	-	-	0.0	-	-	2.0	-	-
103.0	30.0	10.6	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0	32.0	2.8	-	2.9	-	-	4.0	-	-	8.6	-	-
107.0	35.0	0.0	-	0.0	-	-	0.0	-	-	8.4	-	-
107.0	40.0	0.0	-	0.0	-	-	0.0	-	-	5.6	-	-
107.0	45.0	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
107.0	80.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
110.0	33.0	4.8	-	-	4.7	-	0.0	-	-	-	89.3	-
110.0	35.0	10.7	-	-	0.0	-	2.2	-	-	-	10.5	-

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
110.0	40.0	0.0	-	-	0.0	-	8.0	-	-	-	0.0	-
110.0	45.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
113.0	30.0	0.0	-	-	0.0	-	-	-	-	7.7	-	-
113.0	35.0	0.0	-	-	2.7	-	5.2	-	-	0.0	-	-
113.0	40.0	0.0	-	-	0.0	-	5.5	-	-	2.9	-	-
113.0	45.0	8.7	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	50.0	0.0	-	-	0.0	-	0.0	-	-	2.9	-	-
113.0	60.0	0.0	-	-	0.0	-	0.0	-	-	5.8	-	-
115.0	35.0	0.0	-	-	-	-	77.3	-	-	-	-	-
117.0	26.0	0.0	-	-	4.4	-	13.0	-	-	-	0.0	-
117.0	30.0	0.0	-	-	0.0	-	79.0	-	-	-	12.0	-
117.0	35.0	44.9	-	-	0.0	-	3.2	-	-	-	40.5	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	91.2	-
117.0	45.0	3.2	-	-	0.0	-	3.0	-	-	-	63.0	-
117.0	55.0	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0	60.0	0.0	-	-	2.9	-	0.0	-	-	0.0	-	-
118.0	39.0	12.4	-	-	0.0	-	0.0	-	-	-	-	-
119.0	33.0	5.7	-	-	-	-	291.0	-	-	-	77.3	-
120.0	25.0	0.0	-	-	40.9	-	50.1	-	-	-	0.0	-
120.0	30.0	8.3	-	-	43.6	-	55.1	-	-	-	6.3	-
120.0	35.0	16.9	-	-	173.7	-	152.9	-	-	-	0.0	-
120.0	40.0	30.1	-	-	29.6	-	58.7	-	-	-	5.1	-
120.0	45.0	0.0	-	-	83.2	-	2.2	-	-	-	68.5	-
120.0	50.0	0.0	-	-	33.0	-	0.0	-	-	-	225.6	-
120.0	55.0	0.0	-	-	10.4	-	0.0	-	-	-	10.5	-
120.0	60.0	0.0	-	-	27.8	-	0.0	-	-	-	7.5	-
120.0	65.0	0.0	-	-	16.2	-	0.0	-	-	-	2.7	-
120.0	70.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	37.0	0.0	-	-	18.9	-	5.6	-	-	-	46.8	-
123.0	42.0	40.9	-	-	75.3	-	12.4	-	-	-	8.2	-
123.0	45.0	9.0	-	-	28.8	-	12.7	-	-	-	2.9	-
123.0	50.0	0.0	-	-	14.8	-	0.0	-	-	-	8.3	-
123.0	55.0	0.0	-	-	2.8	-	0.0	-	-	-	2.6	-
123.0	65.0	-	-	-	0.0	-	0.0	-	-	-	15.1	-
123.0	70.0	-	-	-	0.0	-	0.0	-	-	-	2.9	-
127.0	34.0	5.2	-	-	23.9	-	0.0	-	-	-	15.2	-
127.0	40.0	3.2	-	-	35.0	-	2.7	-	-	-	0.0	-
127.0	45.0	5.8	-	-	7.6	-	8.6	-	-	-	0.0	-
127.0	50.0	0.0	-	-	0.0	-	7.8	-	-	-	0.0	-
127.0	55.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
127.0	60.0	0.0	-	-	0.0	-	2.4	-	-	-	0.0	-
127.0	65.0	-	-	-	6.7	-	0.0	-	-	-	87.5	-
130.0	30.0	14.1	-	-	23.6	-	0.0	-	-	-	0.0	-
130.0	35.0	12.6	-	-	5.2	-	0.0	-	-	-	0.0	-
130.0	40.0	5.4	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	60.0	2.3	-	-	0.0	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
133.0 25.0	-	-	-	-	0.0	-	0.0	-	-	-	2.7	-
133.0 30.0	-	7.8	-	-	0.0	-	2.7	-	-	-	-	-
133.0 35.0	-	29.4	-	-	0.0	-	0.0	-	-	-	8.3	-
133.0 40.0	-	0.0	-	-	3.1	-	0.0	-	-	-	-	-
133.0 45.0	-	0.0	-	-	2.9	-	6.0	-	-	-	0.0	-
133.0 50.0	-	0.0	-	-	2.6	-	7.7	-	-	-	0.0	-
133.0 55.0	-	0.0	-	-	8.7	-	0.0	-	-	-	0.0	-
137.0 23.0	-	13.0	-	-	1.8	-	4.3	-	-	-	1.5	-
137.0 30.0	-	28.5	-	-	0.0	-	3.0	-	-	-	0.0	-
137.0 35.0	-	8.6	-	-	2.3	-	0.0	-	-	-	0.0	-
137.0 40.0	-	2.4	-	-	6.1	-	0.0	-	-	-	0.0	-
137.0 45.0	-	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-

*Citharichthys stigmaeus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 60.0	2.8	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0 53.0	2.5	-	-	0.0	-	-	0.0	-	-	0.0	-	-
73.0 53.0	0.0	-	-	0.0	-	0.0	-	-	-	7.4	-	-
73.0 60.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-	-
77.0 57.0	2.2	-	-	0.0	-	0.0	-	-	-	0.0	-	-
80.0 52.0	0.0	0.0	-	0.0	-	-	-	-	-	12.2	-	-
80.0 55.0	10.4	2.9	-	0.0	-	-	-	-	-	12.7	-	-
80.0 60.0	3.1	0.0	-	0.0	-	0.0	-	-	-	17.8	-	-
80.0 65.0	0.0	0.0	-	6.1	-	0.0	-	-	-	15.6	-	-
82.0 47.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0 43.0	-	0.0	-	0.0	-	-	0.0	-	-	4.5	-	-
83.0 51.0	-	0.0	-	0.0	-	-	0.0	-	-	2.6	-	-
83.0 60.0	-	0.0	-	0.0	-	-	0.0	-	-	9.1	-	-
83.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	5.6	-	-
83.0 70.0	-	0.0	-	0.0	-	-	2.9	-	-	8.7	-	-
87.0 40.0	-	0.0	-	0.0	-	-	5.8	-	-	2.9	-	-
87.0 65.0	-	0.0	-	0.0	-	-	0.0	-	-	2.7	-	-
87.0 80.0	-	0.0	-	0.0	-	-	0.0	-	-	5.5	-	-
90.0 32.0	0.0	-	-	0.0	-	-	0.0	-	-	2.2	-	-
90.0 37.0	0.0	-	-	0.0	-	-	0.0	-	-	1.8	-	-
90.0 45.0	0.0	-	-	0.0	-	-	0.0	-	-	5.3	-	-
93.0 45.0	-	0.0	-	0.0	-	-	2.8	-	-	2.5	-	-
93.0 50.0	-	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
93.0 55.0	-	0.0	-	0.0	-	-	6.0	-	-	0.0	-	-
93.0 60.0	-	0.0	-	0.0	-	-	6.1	-	-	0.0	-	-
93.0 65.0	-	2.9	-	0.0	-	-	-	-	-	0.0	-	-
97.0 40.0	-	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0 50.0	-	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
100.0 30.0	0.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-

TABLE 4. (cont.)

*Citharichthys stigmaeus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0	35.0	0.0	-	0.0	-	-	0.0	-	-	2.8	-	-
100.0	50.0	0.0	-	0.0	-	-	2.2	-	-	0.0	-	-
103.0	35.0	0.0	-	5.9	-	-	0.0	-	-	0.0	-	-
103.0	40.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
103.0	55.0	0.0	-	2.8	-	-	0.0	-	-	0.0	-	-
107.0	40.0	0.0	-	0.0	-	-	17.4	-	-	0.0	-	-
110.0	35.0	0.0	-	0.0	-	-	2.2	-	-	-	3.5	-
110.0	40.0	0.0	-	0.0	-	-	4.0	-	-	-	0.0	-
110.0	65.0	0.0	-	0.0	-	-	1.9	-	-	-	0.0	-
113.0	35.0	0.0	-	2.7	-	-	0.0	-	-	0.0	-	-
113.0	60.0	0.0	-	0.0	-	-	2.8	-	-	0.0	-	-
117.0	35.0	0.0	-	0.0	-	-	0.0	-	-	-	2.9	-
117.0	60.0	0.0	-	5.8	-	-	0.0	-	-	0.0	-	-

*Hippoglossina stomata*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	43.0	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
87.0	45.0	0.0	-	0.0	-	-	0.0	-	-	5.7	-	-
90.0	28.0	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
100.0	30.0	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
115.0	35.0	0.0	-	-	-	-	4.4	-	-	-	0.0	-
117.0	30.0	0.0	-	-	0.0	-	5.6	-	-	-	3.0	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	25.0	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
120.0	30.0	0.0	-	-	0.0	-	2.9	-	-	-	0.0	-
120.0	40.0	0.0	-	-	9.5	-	5.6	-	-	-	0.0	-
120.0	35.0	0.0	-	-	0.0	-	2.3	-	-	-	0.0	-
120.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	2.2	-
120.0	55.0	0.0	-	-	2.1	-	0.0	-	-	-	0.0	-
123.0	37.0	0.0	-	-	0.0	-	0.0	-	-	-	2.6	-
127.0	34.0	0.0	-	-	5.3	-	2.3	-	-	-	2.5	-
127.0	65.0	2.6	-	-	0.0	-	2.4	-	-	-	0.0	-
127.0	65.0	-	-	-	2.2	-	0.0	-	-	-	0.0	-
133.0	25.0	0.0	-	-	0.0	-	8.5	-	-	-	0.0	-
133.0	35.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	30.0	-	-	-	0.0	-	0.0	-	-	-	0.0	-

*Paralichthys californicus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	40.0	0.8	-	0.0	-	-	0.0	-	-	1.4	-	-
90.0	28.0	-	-	0.0	-	-	4.3	-	-	0.0	-	-
97.0	30.0	2.1	-	0.0	-	-	11.8	-	-	6.2	-	-
97.0	32.0	2.5	-	0.0	-	-	0.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Paralichthys californicus* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
107.0 32.0	-	0.0	-	2.9	-	-	0.0	-	-	0.0	-	-
110.0 33.0	-	2.4	-	-	0.0	-	0.0	-	-	-	2.9	-
110.0 35.0	-	2.7	-	-	0.0	-	0.0	-	-	-	0.0	-
113.0 30.0	-	5.2	-	-	0.0	-	-	-	-	0.0	-	-
117.0 26.0	-	0.0	-	-	2.2	-	0.0	-	-	-	0.0	-
120.0 30.0	-	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0 35.0	-	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
120.0 40.0	-	0.0	-	-	4.8	-	0.0	-	-	-	0.0	-
123.0 37.0	-	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
130.0 30.0	-	4.7	-	-	0.0	-	11.6	-	-	-	0.0	-
130.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-

*Xystreureys liolepis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
113.0 30.0	-	0.0	-	-	0.0	-	-	-	-	2.6	-	-

*Glyptocephalus zachirus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
73.0 60.0	0.0	-	-	3.3	-	0.0	-	-	-	0.0	-	-

*Hypsopsetta guttulata*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
117.0 45.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.2	-

*Lepidopsetta bilineata*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	1.8	-	-	0.0	-	-	0.0	-	-

*Lyopsetta exilis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0 52.0	0.0	-	-	0.0	-	-	0.0	-	-	4.4	-	-
60.0 55.0	6.2	-	-	3.0	-	-	4.4	-	-	0.0	-	-
60.0 60.0	0.0	-	-	0.0	-	-	1.9	-	-	0.0	-	-
60.0 70.0	0.0	-	-	3.4	-	-	0.0	-	-	0.0	-	-
63.0 52.0	0.0	-	-	17.8	-	-	1.1	-	-	0.0	-	-

TABLE 4. (cont.)

*Lyopsetta exilis* (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0	55.0	0.0	-	13.3	-	-	2.3	-	-	0.0	-	-
63.0	60.0	0.0	-	19.9	-	-	0.0	-	-	0.0	-	-
67.0	50.0	0.0	-	3.3	-	-	4.4	-	-	0.0	-	-
67.0	55.0	2.2	-	4.8	-	-	2.7	-	-	0.0	-	-
67.0	60.0	0.0	-	6.9	-	-	0.0	-	-	0.0	-	-
70.0	55.0	0.0	-	0.0	-	-	3.9	-	-	0.0	-	-
70.0	60.0	0.0	-	0.0	-	-	3.9	-	-	0.0	-	-
80.0	52.0	0.0	-	2.4	-	3.1	-	-	-	0.0	-	-
83.0	43.0	0.0	-	19.4	-	-	0.0	-	-	0.0	-	-
83.0	51.0	0.0	-	2.1	-	-	0.0	-	-	0.0	-	-
83.0	90.0	-	-	14.6	-	-	0.0	-	-	0.0	-	-
87.0	35.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
93.0	35.0	5.2	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	1.8	-	-	0.0	-	-	0.0	-	-
110.0	45.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
117.0	30.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
119.0	33.0	0.0	-	-	-	-	3.9	-	-	-	0.0	-
120.0	30.0	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-

*Microstomus pacificus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	50.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-

*Parophrys vetulus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0	52.0	0.0	-	1.8	-	-	0.0	-	-	0.0	-	-
77.0	57.0	0.0	-	0.0	-	7.1	-	-	-	0.0	-	-
80.0	60.0	0.0	-	2.7	-	0.0	-	-	-	0.0	-	-
83.0	43.0	0.0	-	4.8	-	-	0.0	-	-	0.0	-	-
83.0	60.0	0.0	-	2.5	-	-	0.0	-	-	0.0	-	-
87.0	35.0	0.0	-	6.1	-	-	0.0	-	-	0.0	-	-
93.0	28.0	0.0	-	3.0	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	1.8	-	-	0.0	-	-	0.0	-	-
110.0	33.0	4.8	-	-	2.4	-	0.0	-	-	-	2.9	-
110.0	45.0	2.2	-	0.0	0.0	-	0.0	-	-	-	0.0	-
120.0	40.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	60.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-

TABLE 4. (cont.)

*Pleuronichthys* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0 90.0	-	-	-	2.9	-	-	0.0	-	-	0.0	-	-
120.0 30.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.3	-
123.0 45.0	-	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
130.0 35.0	-	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-

*Pleuronichthys coenosus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 70.0	0.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
80.0 60.0	0.0	0.0	-	0.0	-	0.0	-	-	-	2.5	-	-

*Pleuronichthys decurrens*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
70.0 60.0	0.0	-	-	3.0	-	-	0.0	-	-	0.0	-	-

*Pleuronichthys ritteri*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
97.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	2.1	-	-
110.0 33.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
113.0 30.0	-	0.0	-	-	0.0	-	-	-	-	2.6	-	-
118.0 39.0	-	0.0	-	-	0.0	-	0.0	-	-	-	3.1	-
120.0 25.0	-	0.0	-	-	0.0	-	0.0	-	-	-	2.1	-

*Pleuronichthys verticalis*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
63.0 52.0	0.0	-	-	0.0	-	-	0.0	-	-	5.7	-	-
83.0 40.0	-	0.0	-	1.6	-	-	0.0	-	-	0.0	-	-
97.0 30.0	-	0.0	-	0.0	-	-	0.0	-	-	4.2	-	-
100.0 30.0	0.0	-	-	3.7	-	-	0.0	-	-	0.0	-	-
110.0 33.0	-	0.0	-	-	2.4	-	0.0	-	-	-	2.9	-
115.0 35.0	-	0.0	-	-	-	-	2.2	-	-	-	-	-
120.0 35.0	-	0.0	-	-	2.4	-	0.0	-	-	-	0.0	-
120.0 40.0	-	0.0	-	-	1.2	-	0.0	-	-	-	5.1	-

*Psettichthys melanostictus*

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
87.0 50.0	-	0.0	-	0.0	-	-	2.0	-	-	0.0	-	-

TABLE 4. (cont.)

*Symphurus* spp.

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	43.0	0.0	-	0.0	-	-	0.0	-	-	2.3	-	-
103.0	50.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0	45.0	0.0	-	0.0	-	-	0.0	-	-	3.2	-	-
117.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	6.1	-
117.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	6.3	-
118.0	39.0	0.0	-	-	0.0	-	0.0	-	-	-	6.2	-
120.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	3.4	-
123.0	42.0	0.0	-	-	0.0	-	0.0	-	-	-	2.7	-
123.0	65.0	-	-	-	0.0	-	0.0	-	-	-	6.0	-
127.0	34.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
133.0	25.0	-	-	-	0.0	-	0.0	-	-	-	5.4	-
133.0	35.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
133.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
133.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	5.6	-
137.0	40.0	2.4	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	50.0	0.0	-	-	0.0	-	0.0	-	-	-	2.8	-
140.0	30.0	-	-	-	-	-	-	-	-	-	5.4	-
140.0	35.0	-	-	-	-	-	-	-	-	-	12.8	-

## Disintegrated fish larva

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	52.0	-	-	0.0	-	-	3.3	-	-	0.0	-	-
60.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0	70.0	-	-	3.4	-	-	7.0	-	-	0.0	-	-
60.0	90.0	-	-	0.0	-	-	0.0	-	-	2.3	-	-
60.0	100.0	-	-	0.0	-	-	1.8	-	-	0.0	-	-
60.0	120.0	-	-	0.0	-	-	5.8	-	-	0.0	-	-
60.0	160.0	-	-	0.0	-	-	0.0	-	-	2.7	-	-
60.0	180.0	-	-	0.0	-	-	2.3	-	-	0.0	-	-
60.0	200.0	-	-	2.3	-	-	8.4	-	-	0.0	-	-
63.0	52.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	55.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
63.0	60.0	-	-	11.9	-	-	0.0	-	-	2.9	-	-
67.0	55.0	-	-	4.8	-	-	0.0	-	-	0.0	-	-
70.0	55.0	-	-	5.0	-	-	0.0	-	-	0.0	-	-
70.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	70.0	-	-	6.7	-	-	0.0	-	-	0.0	-	-
70.0	80.0	-	-	2.4	-	-	0.0	-	-	0.0	-	-
70.0	90.0	-	-	2.4	-	-	36.9	-	-	0.0	-	-
70.0	100.0	-	-	10.3	-	-	0.0	-	-	0.0	-	-
70.0	120.0	-	-	0.0	-	-	1.5	-	-	2.7	-	-
70.0	200.0	-	-	5.5	-	-	0.0	-	-	0.0	-	-
77.0	55.0	-	-	3.4	-	0.0	-	-	-	0.0	-	-
77.0	57.0	-	-	0.0	-	3.5	-	-	-	0.0	-	-



TABLE 4. (cont.)

## Disintegrated fish larva (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
80.0	52.0	2.6		0.0		0.0	-	-	-	0.0	-	-
80.0	55.0	2.6		0.0		0.0	-	-	-	0.0	-	-
80.0	60.0	1.5		0.0		0.0	-	-	-	0.0	-	-
80.0	70.0	0.0		2.6		0.0	-	-	-	0.0	-	-
80.0	80.0	0.0		2.9		0.0	-	-	-	0.0	-	-
80.0	90.0	0.0		7.6		-	0.0	-	-	0.0	-	-
80.0	200.0	2.5		2.3		-	0.0	-	-	0.0	-	-
83.0	40.0	7.3		0.0		-	0.0	-	-	0.0	-	-
83.0	55.0	4.1		2.8		-	0.0	-	-	0.0	-	-
83.0	60.0	0.0		2.5		-	6.0	-	-	0.0	-	-
83.0	65.0	0.0		0.0		-	2.9	-	-	0.0	-	-
83.0	70.0	2.8		0.0		-	0.0	-	-	2.9	-	-
83.0	80.0	5.6		0.0		-	0.0	-	-	0.0	-	-
87.0	35.0	0.0		3.1		-	0.0	-	-	0.0	-	-
87.0	40.0	0.0		3.5		-	0.0	-	-	0.0	-	-
87.0	45.0	2.7		0.0		-	0.0	-	-	0.0	-	-
87.0	50.0	2.5		0.0		-	2.0	-	-	0.0	-	-
87.0	55.0	5.5		6.1		-	5.7	-	-	0.0	-	-
87.0	60.0	0.0		0.0		-	2.9	-	-	0.0	-	-
87.0	65.0	0.0		0.0		-	0.0	-	-	0.0	-	-
87.0	70.0	2.7		3.3		-	2.8	-	-	0.0	-	-
87.0	80.0	0.0		14.9		-	2.1	-	-	0.0	-	-
90.0	28.0	-		2.5		-	0.0	-	-	0.0	-	-
90.0	32.0	2.7		11.1		-	0.0	-	-	0.0	-	-
90.0	37.0	2.1		11.0		-	21.7	-	-	0.0	-	-
90.0	45.0	0.0		5.8		-	4.1	-	-	0.0	-	-
90.0	65.0	0.0		5.6		-	0.0	-	-	0.0	-	-
90.0	70.0	0.0		0.0		-	2.8	-	-	0.0	-	-
90.0	90.0	0.0		0.0		-	0.0	-	-	0.0	-	-
90.0	100.0	0.0		0.0		-	2.6	-	-	0.0	-	-
90.0	160.0	0.0		1.7		-	0.0	-	-	0.0	-	-
90.0	180.0	2.3		0.0		-	0.0	-	-	0.0	-	-
90.0	200.0	0.0		0.0		-	2.8	-	-	0.0	-	-
93.0	28.0	-		0.0		-	0.0	-	-	0.0	-	-
93.0	35.0	7.8		0.0		-	0.0	-	-	0.0	-	-
93.0	40.0	5.5		5.9		-	0.0	-	-	0.0	-	-
93.0	45.0	0.0		2.9		-	0.0	-	-	0.0	-	-
93.0	100.0	5.5		3.3		-	0.0	-	-	3.0	-	-
97.0	30.0	0.0		0.0		-	1.5	-	-	0.0	-	-
97.0	35.0	19.9		0.0		-	2.9	-	-	0.0	-	-
97.0	45.0	0.0		6.0		-	0.0	-	-	0.0	-	-
97.0	50.0	0.0		5.6		-	0.0	-	-	0.0	-	-
97.0	70.0	0.0		0.0		-	9.2	-	-	0.0	-	-
97.0	80.0	0.0		0.0		-	3.0	-	-	0.0	-	-
100.0	40.0	6.1		0.0		-	0.0	-	-	0.0	-	-
100.0	45.0	2.8		0.0		-	3.3	-	-	0.0	-	-

TABLE 4. (cont.)

## Disintegrated fish larva (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
100.0	65.0	0.0	-	0.0	-	-	0.0	-	-	1.5	-	-
100.0	70.0	0.0	-	5.2	-	-	0.0	-	-	0.0	-	-
100.0	90.0	0.0	-	2.3	-	-	0.0	-	-	0.0	-	-
100.0	100.0	2.6	-	0.0	-	-	0.0	-	-	5.2	-	-
100.0	120.0	0.0	-	0.0	-	-	2.5	-	-	0.0	-	-
103.0	35.0	7.0	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0	55.0	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0	70.0	0.0	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0	90.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
107.0	32.0	5.5	-	0.0	-	-	2.0	-	-	2.8	-	-
107.0	35.0	0.0	-	0.0	-	-	0.0	-	-	2.9	-	-
107.0	40.0	6.1	-	0.0	-	-	0.0	-	-	2.8	-	-
107.0	60.0	0.0	-	3.0	-	-	2.8	-	-	0.0	-	-
107.0	70.0	0.0	-	0.0	-	-	12.6	-	-	0.0	-	-
110.0	33.0	2.4	-	-	0.0	-	0.0	-	-	-	0.0	-
110.0	35.0	0.0	-	-	0.0	-	0.0	-	-	-	3.5	-
110.0	40.0	0.0	-	-	8.0	-	0.0	-	-	-	0.0	-
110.0	50.0	0.0	-	-	3.4	-	2.7	-	-	-	0.0	-
110.0	70.0	0.0	-	-	2.8	-	3.3	-	-	2.1	-	-
110.0	90.0	-	-	-	0.0	-	4.8	-	-	0.0	-	-
110.0	100.0	-	-	-	3.0	-	0.0	-	-	2.8	-	-
110.0	120.0	0.0	-	-	0.0	-	2.3	-	-	2.0	-	-
113.0	35.0	2.9	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	45.0	0.0	-	-	0.0	-	0.0	-	-	0.0	-	-
113.0	70.0	0.0	-	-	0.0	-	3.0	-	-	0.0	-	-
113.0	80.0	0.0	-	-	0.0	-	2.9	-	-	0.0	0.0	-
117.0	26.0	0.0	-	-	2.2	-	0.0	-	-	-	0.0	-
117.0	30.0	0.0	-	-	0.0	-	2.8	-	-	-	0.0	-
117.0	35.0	0.0	-	-	2.7	-	0.0	-	-	-	0.0	-
117.0	45.0	0.0	-	-	0.0	-	5.9	-	-	0.0	0.0	-
117.0	55.0	0.0	-	-	2.5	-	8.7	-	-	0.0	-	-
117.0	60.0	0.0	-	-	5.8	-	2.9	-	-	0.0	-	-
120.0	25.0	0.0	-	-	0.0	-	0.0	-	-	-	4.2	-
120.0	40.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	50.0	0.0	-	-	5.1	-	0.0	-	-	-	0.0	-
120.0	55.0	0.0	-	-	2.1	-	2.7	-	-	-	0.0	-
120.0	60.0	0.0	-	-	0.0	-	2.6	-	-	-	0.0	-
120.0	70.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
120.0	80.0	0.0	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0	90.0	0.0	-	-	2.3	-	0.0	-	-	-	0.0	-
120.0	100.0	0.0	-	-	2.3	-	0.0	-	-	-	2.9	-
120.0	120.0	0.0	-	-	2.7	-	2.4	-	-	-	0.0	-
123.0	37.0	0.0	-	-	5.4	-	0.0	-	-	-	0.0	-
123.0	50.0	0.0	-	-	2.5	-	3.0	-	-	-	0.0	-
123.0	55.0	0.0	-	-	2.8	-	0.0	-	-	-	2.6	-
123.0	80.0	-	-	-	0.0	-	0.0	-	-	-	2.8	-

TABLE 4. (cont.)

## Disintegrated fish larva (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
127.0	34.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	30.0	4.7	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	35.0	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
130.0	60.0	2.3	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	70.0	0.0	-	-	5.4	-	0.0	-	-	-	0.0	-
130.0	80.0	0.0	-	-	2.9	-	10.8	-	-	-	0.0	-
130.0	90.0	0.0	-	-	0.0	-	2.4	-	-	-	0.0	-
130.0	100.0	5.6	-	-	28.4	-	0.0	-	-	-	0.0	-
133.0	25.0	-	-	-	2.2	-	0.0	-	-	-	0.0	-
133.0	35.0	9.8	-	-	0.0	-	0.0	-	-	-	-	-
133.0	40.0	3.1	-	-	3.1	-	0.0	-	-	-	-	-
133.0	50.0	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
133.0	55.0	5.7	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	3.0	-
133.0	65.0	-	-	-	0.0	-	0.0	-	-	-	3.1	-
137.0	23.0	0.0	-	-	0.0	-	2.2	-	-	-	0.0	-
137.0	35.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	40.0	4.7	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	50.0	2.6	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	55.0	2.5	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	70.0	0.0	-	-	2.9	-	0.0	-	-	-	0.0	-

## Unidentified fish larva

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
60.0	52.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
60.0	70.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
60.0	120.0	-	-	5.8	-	-	0.0	-	-	0.0	-	-
60.0	140.0	-	-	0.0	-	-	0.0	-	-	2.9	-	-
60.0	160.0	-	-	11.7	-	-	2.8	-	-	0.0	-	-
60.0	180.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
60.0	200.0	-	-	0.0	-	-	4.2	-	-	0.0	-	-
67.0	50.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
67.0	60.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	80.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
70.0	100.0	-	-	0.0	-	-	3.7	-	-	0.0	-	-
70.0	200.0	-	-	0.0	-	-	11.6	-	-	0.0	-	-
80.0	52.0	0.0	-	2.4	-	0.0	-	-	-	0.0	-	-
80.0	90.0	-	-	0.0	-	-	0.0	-	-	2.6	-	-
80.0	120.0	-	-	0.0	-	-	8.4	-	-	0.0	-	-
80.0	200.0	0.0	-	4.7	-	-	0.0	-	-	0.0	-	-
82.0	47.0	2.9	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	40.0	0.8	-	0.0	-	-	0.0	-	-	0.0	-	-
83.0	43.0	0.0	-	0.0	-	-	5.9	-	-	0.0	-	-
83.0	51.0	0.0	-	0.0	-	-	3.6	-	-	0.0	-	-

TABLE 4. (cont.)

## Unidentified fish larva (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
83.0	90.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
87.0	35.0	0.0	-	3.1	-	-	0.0	-	-	0.0	-	-
87.0	70.0	0.0	-	0.0	-	-	2.9	-	-	0.0	-	-
90.0	28.0	-	-	5.0	-	-	10.7	-	-	0.0	-	-
90.0	32.0	-	-	2.5	-	-	0.0	-	-	0.0	-	-
90.0	65.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0	80.0	-	-	2.9	-	-	0.0	-	-	0.0	-	-
90.0	120.0	-	-	2.2	-	-	0.0	-	-	0.0	-	-
90.0	140.0	-	-	5.0	-	-	0.0	-	-	0.0	-	-
90.0	180.0	-	-	5.3	-	-	0.0	-	-	0.0	-	-
90.0	200.0	-	-	4.1	-	-	0.0	-	-	0.0	-	-
93.0	28.0	5.4	-	0.0	-	-	0.0	-	-	0.0	-	-
93.0	70.0	0.0	-	7.3	-	-	-	-	-	0.0	-	-
93.0	100.0	0.0	-	0.0	-	-	3.0	-	-	0.0	-	-
97.0	30.0	8.5	-	0.0	-	-	29.4	-	-	0.0	-	-
97.0	35.0	2.8	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	30.0	-	-	3.7	-	-	0.0	-	-	0.0	-	-
100.0	60.0	-	-	0.0	-	-	2.6	-	-	2.3	-	-
100.0	70.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
100.0	100.0	2.6	-	0.0	-	-	4.7	-	-	0.0	-	-
103.0	30.0	1.3	-	0.0	-	-	0.0	-	-	0.0	-	-
103.0	60.0	0.0	-	2.9	-	-	6.0	-	-	0.0	-	-
103.0	65.0	2.9	-	0.0	-	-	3.3	-	-	0.0	-	-
103.0	70.0	2.7	-	0.0	-	-	3.1	-	-	0.0	-	-
103.0	80.0	0.0	-	0.0	-	-	9.5	-	-	0.0	-	-
103.0	90.0	-	-	0.0	-	-	2.9	-	-	0.0	-	-
107.0	32.0	0.0	-	0.0	-	-	22.2	-	-	2.9	-	-
107.0	65.0	0.0	-	2.6	-	-	64.2	-	-	0.0	-	-
107.0	70.0	0.0	-	0.0	-	-	40.8	-	-	0.0	-	-
110.0	33.0	7.2	-	-	-	-	3.8	-	-	-	0.0	-
110.0	35.0	10.7	-	-	0.0	-	2.2	-	-	-	7.0	-
110.0	70.0	0.0	-	-	2.7	-	3.3	-	-	0.0	-	-
110.0	80.0	-	-	-	0.0	-	3.3	-	-	0.0	-	-
110.0	100.0	0.0	-	-	3.0	-	0.0	-	-	0.0	-	-
110.0	120.0	0.0	-	-	0.0	-	0.0	-	-	2.0	-	-
113.0	90.0	-	-	-	0.0	-	2.8	-	-	5.7	-	-
117.0	26.0	0.0	-	-	0.0	-	13.0	-	-	-	0.0	-
117.0	30.0	0.0	-	-	0.0	-	14.1	-	-	-	3.0	-
117.0	35.0	0.0	-	-	0.0	-	9.6	-	-	-	0.0	-
117.0	40.0	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
117.0	60.0	0.0	-	-	0.0	-	2.9	-	-	0.0	-	-
117.0	65.0	3.2	-	-	0.0	-	0.0	-	-	0.0	-	-
117.0	70.0	2.9	-	-	0.0	-	0.0	-	-	0.0	-	-
119.0	33.0	2.8	-	-	-	-	1.9	-	-	-	0.0	-
120.0	25.0	6.5	-	-	0.0	-	4.4	-	-	-	0.0	-
120.0	30.0	0.0	-	-	7.3	-	2.9	-	-	-	0.0	-

TABLE 4. (cont.)

## Unidentified fish larva (cont.)

STATION	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
120.0	40.0	0.0	-	-	2.4	-	1.1	-	-	-	0.0	-
120.0	45.0	11.6	-	-	5.2	-	4.4	-	-	-	0.0	-
120.0	50.0	0.0	-	-	2.5	-	0.0	-	-	-	0.0	-
120.0	55.0	2.8	-	-	2.1	-	16.2	-	-	-	0.0	-
120.0	70.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
120.0	90.0	36.4	-	-	0.0	-	0.0	-	-	-	2.5	-
120.0	100.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
120.0	120.0	5.9	-	-	5.5	-	0.0	-	-	-	0.0	-
123.0	37.0	5.5	-	-	0.0	-	2.8	-	-	-	0.0	-
123.0	42.0	14.6	-	-	0.0	-	0.0	-	-	-	0.0	-
123.0	45.0	0.0	-	-	2.6	-	38.0	-	-	-	0.0	-
123.0	55.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
123.0	70.0	-	-	-	0.0	-	0.0	-	-	-	2.9	-
123.0	80.0	-	-	-	0.0	-	2.8	-	-	-	0.0	-
127.0	34.0	0.0	-	-	0.0	-	0.0	-	-	-	5.1	-
127.0	50.0	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	55.0	3.0	-	-	0.0	-	0.0	-	-	-	0.0	-
127.0	70.0	-	-	-	0.0	-	0.0	-	-	-	2.6	-
127.0	80.0	-	-	-	0.0	-	2.9	-	-	-	0.0	-
130.0	30.0	23.6	-	-	0.0	-	0.0	-	-	-	10.0	-
130.0	40.0	2.7	-	-	0.0	-	0.0	-	-	-	2.6	-
130.0	45.0	0.0	-	-	0.0	-	0.0	-	-	-	2.9	-
130.0	60.0	0.0	-	-	3.9	-	0.0	-	-	-	0.0	-
130.0	90.0	2.8	-	-	0.0	-	0.0	-	-	-	0.0	-
130.0	100.0	0.0	-	-	2.6	-	0.0	-	-	-	0.0	-
130.0	120.0	0.0	-	-	2.8	-	0.0	-	-	-	0.0	-
133.0	35.0	9.8	-	-	0.0	-	0.0	-	-	-	2.8	-
133.0	55.0	5.7	-	-	0.0	-	0.0	-	-	-	0.0	-
133.0	65.0	-	-	-	0.0	-	0.0	-	-	-	6.1	-
137.0	23.0	2.2	-	-	0.0	-	2.2	-	-	-	0.0	-
137.0	35.0	5.8	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	40.0	0.0	-	-	3.0	-	0.0	-	-	-	0.0	-
137.0	45.0	2.9	-	-	0.0	-	0.0	-	-	-	0.0	-
137.0	50.0	5.1	-	-	2.8	-	0.0	-	-	-	2.8	-
137.0	55.0	2.5	-	-	0.0	-	0.0	-	-	-	2.7	-
137.0	60.0	0.0	-	-	0.0	-	0.0	-	-	-	11.4	-
137.0	80.0	5.2	-	-	0.0	-	0.0	-	-	-	0.0	-
140.0	30.0	-	-	-	-	-	-	-	-	-	8.0	-
140.0	50.0	-	-	-	-	-	-	-	-	-	3.4	-

TABLE 5. Summary of pooled occurrences of all larval fish taxa taken on CalCOFI surveys from 1961 to 1969. Taxa are listed in the same order as Table 4.

NAME	1961	1962	1963	1964	1965	1966	1967	1968	1969
<i>Anguilliformes</i>	7	8	20	8	24	17	5	3	13
<i>Etrumeus acuminatus</i>	4	7	36	37	35	26	7	1	9
<i>Opisthonema</i> spp.	-	-	-	-	2	3	-	-	-
<i>Sardinops sagax</i>	53	58	99	88	104	143	31	10	79
<i>Engraulis mordax</i>	408	454	567	707	618	987	150	188	880
<i>Argentina sialis</i>	18	49	33	37	49	93	21	18	98
<i>Microstoma microstoma</i>	12	19	11	31	17	48	9	19	73
<i>Nansenia candida</i>	9	13	5	7	9	39	6	12	32
<i>Nansenia crassa</i>	29	15	30	33	22	48	8	5	40
<i>Bathylagus</i> spp.	18	1	54	1	7	18	6	35	215
<i>Bathylagus milleri</i>	-	-	2	3	1	1	-	1	33
<i>Bathylagus ochotensis</i>	57	66	98	196	127	260	28	106	359
<i>Bathylagus pacificus</i>	5	7	8	38	3	26	-	15	80
<i>Bathylagus wesethi</i>	149	168	160	235	220	461	99	90	328
<i>Leuroglossus stilbius</i>	202	225	236	360	300	449	43	116	498
<i>Dolichopteryx</i> spp.	-	-	-	-	-	-	-	-	1
<i>Macropinna microstoma</i>	1	-	-	-	-	-	-	-	-
<i>Osmeridae</i>	-	-	2	-	-	-	-	-	1
<i>Stomiiformes</i>	12	4	3	6	1	6	9	1	4
<i>Gonostomatidae</i>	2	5	12	8	18	8	-	4	126
<i>Cyclothone</i> spp.	214	277	241	247	265	593	80	65	346
<i>Diplophos taenia</i>	5	5	7	-	3	11	1	1	7
<i>Ichthyococcus</i> spp.	4	11	11	13	7	35	5	2	34
<i>Vinciguerria lucetia</i>	342	371	383	369	436	828	121	82	479
<i>Vinciguerria poweriae</i>	3	7	3	4	3	6	-	-	1
<i>Woodsia nonsuchae</i>	-	-	1	-	-	-	-	-	-
<i>Sternoptychidae</i>	54	71	45	79	59	250	28	48	469
<i>Astronesthidae</i>	-	2	-	-	-	-	-	-	1
<i>Chauliodus macouni</i>	28	28	31	68	57	171	9	46	189
<i>Idiacanthus antrostomus</i>	48	43	26	32	33	72	15	22	114
<i>Aristostomias scintillans</i>	9	10	9	6	9	12	2	-	11
<i>Bathophilus</i> spp.	5	10	4	3	4	5	2	1	2
<i>Eustomias</i> spp.	1	1	1	1	1	-	-	1	-
<i>Photonectes</i> spp.	7	3	2	2	6	4	-	-	-
<i>Tactostoma macropus</i>	7	4	-	4	2	16	3	-	4
<i>Stomias atriventer</i>	58	76	98	81	100	326	24	46	214
<i>Evermannellidae</i>	1	3	1	1	1	-	-	-	-
<i>Paralepididae</i>	-	3	5	10	3	-	-	3	6
<i>Lestidiops ringens</i>	50	80	58	63	67	232	36	52	231
<i>Notolepis risso</i>	9	12	9	7	9	12	2	8	18
<i>Paralepis atlantica</i>	-	-	-	-	1	-	-	1	1
<i>Stemonosudis macrura</i>	4	6	-	2	6	5	-	-	-
<i>Sudis atrox</i>	2	4	-	2	4	-	-	-	-
<i>Aulopus</i> spp.	-	-	-	-	-	1	-	-	-
<i>Scopelosaurus</i> spp.	16	10	8	16	19	21	6	3	36
<i>Scopelarchidae</i>	67	60	50	21	33	114	29	13	93

TABLE 5. (cont.)

NAME	1961	1962	1963	1964	1965	1966	1967	1968	1969
Myctophidae	165	151	179	220	222	346	33	79	329
<i>Ceratoscopelus townsendi</i>	149	157	128	146	156	302	37	23	153
<i>Diaphus</i> spp.	77	56	46	101	80	187	46	34	110
<i>Lampadena urophaos</i>	53	45	50	25	32	62	10	1	23
<i>Lampanyctus</i> spp.	148	139	199	155	183	401	67	65	550
<i>Lampanyctus regalis</i>	13	12	2	20	9	46	12	11	19
<i>Lampanyctus ritleri</i>	154	204	120	189	234	523	43	72	155
<i>Notolichnus valdiviae</i>	29	13	22	16	21	22	7	1	10
<i>Notoscopelus resplendens</i>	59	41	50	39	44	54	11	3	29
<i>Parvilux ingens</i>	-	-	-	-	-	-	-	-	1
<i>Stenobrachius leucopsarus</i>	177	179	186	342	263	420	31	127	390
<i>Triphoturus mexicanus</i>	407	422	451	448	494	990	142	92	556
<i>Triphoturus nigrescens</i>	4	-	-	-	1	-	-	-	-
<i>Benthosema pterota</i>	-	-	-	-	-	3	-	-	-
<i>Centrobranchus</i> spp.	2	10	-	2	2	-	1	-	2
<i>Diogenichthys</i> spp.	54	62	88	61	11	165	16	13	79
<i>Diogenichthys atlanticus</i>	102	155	92	111	116	171	38	46	210
<i>Diogenichthys laternatus</i>	94	127	161	163	249	361	63	32	210
<i>Electrona rissoi</i>	3	5	-	3	2	3	-	-	7
<i>Gonichthys tenuiculus</i>	20	24	29	46	81	146	16	12	48
<i>Hygophum</i> spp.	4	3	29	6	11	4	-	-	13
<i>Hygophum atratum</i>	27	38	41	44	103	178	21	6	81
<i>Hygophum reinhardtii</i>	39	58	27	20	27	9	7	-	10
<i>Loweina rara</i>	8	4	5	4	8	6	1	-	11
<i>Myctophum nitidulum</i>	46	42	31	32	19	58	11	8	59
<i>Protomymyctophum crockeri</i>	247	252	225	292	261	671	109	139	717
<i>Protomymyctophum thompsoni</i>	-	-	-	-	-	-	-	-	9
<i>Symbolophorus californiensis</i>	82	140	78	116	111	291	38	61	157
<i>Tarletonbeania crenularis</i>	160	115	111	140	132	208	10	73	277
<i>Synodus</i> spp.	19	23	41	35	42	121	23	-	54
<i>Bregmaceros</i> spp.	-	-	-	-	-	2	-	-	-
<i>Microgadus proximus</i>	-	-	-	3	-	2	-	-	-
<i>Merluccius productus</i>	152	228	229	290	290	398	25	95	361
<i>Physiculus</i> spp.	-	1	1	1	3	2	1	-	2
Macrouridae	4	6	6	5	3	5	2	3	14
Ophidiiformes	16	16	35	49	37	69	10	16	45
<i>Brosomphycis marginata</i>	-	2	3	3	7	17	5	8	16
Carapidae	-	1	-	1	-	-	-	-	-
<i>Chilara taylori</i>	12	31	15	11	29	55	15	-	28
<i>Ophidion scrippsae</i>	2	10	61	19	40	67	-	-	34
<i>Porichthys</i> spp.	1	-	1	1	-	1	1	-	2
Ceratioidei	15	26	17	7	18	43	-	-	30
Gobiesocidae	3	-	5	8	9	12	-	-	1
Exocoetidae	2	-	1	3	2	10	-	2	5
Hemiramphidae	-	-	-	2	1	-	-	-	-
<i>Cololabis saira</i>	11	6	13	22	9	31	3	10	32
Atherinidae	-	-	9	23	8	11	2	2	5
Trachipteridae	27	27	20	22	19	75	6	9	80
Eutaeniophoridae	-	-	-	-	-	-	-	-	5

TABLE 5. (cont.)

NAME	1961	1962	1963	1964	1965	1966	1967	1968	1969
<i>Melamphaes</i> spp.	117	106	134	114	151	340	68	84	333
<i>Poromitra</i> spp.	13	18	28	28	32	51	6	14	27
<i>Scopeloberyx robustus</i>	4	2	2	-	7	-	-	-	2
<i>Scopelogadus bispinosus</i>	18	34	10	31	13	60	4	5	17
<i>Macroramphosus gracilis</i>	3	6	6	3	7	6	7	-	11
<i>Syngnathus</i> spp.	6	5	8	12	12	15	6	3	10
Agonidae	3	6	16	24	22	20	5	4	9
<i>Anoplopoma fimbria</i>	-	-	-	1	-	-	-	-	-
Cottidae	11	21	33	45	37	43	5	12	40
<i>Scorpaenichthys marmoratus</i>	3	3	7	13	20	15	-	5	24
Cyclopteridae	8	2	12	14	16	14	4	4	17
Hexagrammidae	-	1	-	2	1	1	-	1	6
<i>Ophiodon elongatus</i>	-	-	-	-	-	1	-	1	1
<i>Oxylebius pictus</i>	6	3	7	27	13	7	-	5	20
<i>Zaniolepis</i> spp.	2	9	12	11	7	26	7	3	19
Scorpaenidae	-	1	2	-	-	1	1	-	-
<i>Scorpaena</i> spp.	11	11	17	16	25	62	8	3	12
<i>Sebastes</i> spp.	311	273	289	492	387	698	H1	207	705
<i>Sebastolobus</i> spp.	8	2	17	20	20	87	4	14	47
<i>Prionotus</i> spp.	10	9	40	15	30	25	-	-	19
Acanthuridae	-	-	1	-	-	-	-	-	-
Blennioidei	1	-	14	6	4	-	3	-	4
<i>Hypsoblennius</i> spp.	11	14	68	69	73	77	19	6	61
Clinidae	12	21	31	44	64	51	9	10	51
Gobiidae	31	41	87	80	104	198	36	19	138
<i>Icosteus aenigmaticus</i>	1	1	1	1	-	3	-	-	1
Labridae	-	2	9	-	7	-	2	3	-
<i>Halichoeres</i> spp.	12	12	40	18	36	50	4	1	28
<i>Oxyjulis californica</i>	23	22	34	15	31	97	23	15	58
<i>Semicossyphus pulcher</i>	6	10	21	7	27	28	4	-	8
Pomacentridae	-	-	10	4	8	5	-	-	-
<i>Chromis punctipinnis</i>	3	21	42	13	39	105	5	1	54
<i>Hypsypops rubicundus</i>	-	-	1	-	8	1	-	-	-
<i>Hugil</i> spp.	-	-	-	1	1	5	1	-	-
Apogonidae	-	-	-	-	-	1	-	-	-
<i>Howella brodiei</i>	16	7	-	5	4	3	1	1	4
<i>Brama</i> spp.	21	17	17	7	9	21	1	-	12
Carangidae	-	1	20	14	25	13	2	-	3
<i>Seriola lalandi</i>	5	12	15	7	14	30	5	4	9
<i>Trachurus symmetricus</i>	144	208	199	206	214	503	76	85	248
<i>Caristius macropus</i>	-	-	-	-	1	1	-	-	-
<i>Coryphaena hippurus</i>	-	7	2	1	10	5	1	-	1
<i>Chaetodipterus zonatus</i>	-	-	1	-	-	-	-	-	-
Gerreidae	-	2	15	10	14	12	2	-	4
Haemulidae	-	1	13	16	11	17	-	-	4
<i>Girella nigricans</i>	5	1	11	3	3	4	3	7	7
<i>Medialuna californiensis</i>	4	11	13	4	5	22	6	3	12
<i>Caulolatilus princeps</i>	4	3	2	3	7	5	1	-	2
Mullidae	-	-	2	-	-	-	-	-	-



TABLE 5. (cont.)

NAME	1961	1962	1963	1964	1965	1966	1967	1968	1969
Sciaenidae	28	42	85	135	147	157	32	38	195
Serranidae	10	6	68	38	59	91	23	2	72
Sparidae	-	-	1	-	-	-	-	-	-
Polynemidae	7	-	6	5	8	7	-	-	1
Gempylidae	3	15	3	2	4	-	8	2	2
Scombridae	-	-	2	-	8	4	-	-	2
Auxis spp.	7	3	10	8	9	29	1	-	30
<i>Sarda chiliensis</i>	26	32	57	39	34	68	14	-	24
<i>Scomber japonicus</i>	1	-	1	1	5	3	-	-	-
<i>Scomberomorus</i> spp.	10	23	27	17	27	74	10	-	23
Trichiuridae	6	6	22	10	25	31	7	4	15
<i>Sphyræna argentea</i>	38	39	52	78	53	131	18	48	202
<i>Ichthyos lockingtoni</i>	-	-	1	1	1	2	-	-	1
Nomeidae	2	19	19	18	45	52	22	11	45
<i>Peprilus simillimus</i>	45	76	98	46	31	74	36	5	48
<i>Tetragonurus cuvieri</i>	25	22	39	13	40	60	6	10	41
Chiasmodontidae	2	-	13	7	4	-	1	1	7
pleuronectiformes	-	-	2	-	-	-	-	-	-
<i>Bothus</i> spp.	186	221	281	243	342	590	108	101	611
<i>Citharichthys</i> spp.	50	97	65	73	65	171	19	42	269
<i>Citharichthys stigmæus</i>	24	15	44	42	44	83	12	5	52
<i>Hippoglossina stomata</i>	21	37	57	96	107	81	13	13	60
<i>Paralichthys californicus</i>	-	-	3	-	1	3	-	-	-
<i>Syacium ovale</i>	1	9	15	18	8	30	4	-	22
<i>Xystreureus liolepis</i>	2	-	9	18	4	36	-	14	15
<i>Glyptocephalus zachirus</i>	1	-	4	5	10	3	-	-	6
<i>Hypsopsetta guttulata</i>	1	1	-	1	2	3	2	2	1
<i>Lepidopsetta bilineata</i>	32	31	33	46	33	72	4	20	65
<i>Lyopsetta exilis</i>	2	-	11	13	16	52	13	17	56
<i>Microstomus pacificus</i>	14	32	41	41	81	80	6	21	80
<i>Parophrys vetulus</i>	-	-	-	-	-	3	-	-	-
<i>Platichthys stellatus</i>	4	3	10	12	1	-	10	3	1
<i>Pleuronichthys</i> spp.	2	2	6	9	5	11	1	3	15
<i>Pleuronichthys coenosus</i>	1	4	-	1	4	11	-	2	11
<i>Pleuronichthys decurrens</i>	5	3	12	12	9	8	2	1	7
<i>Pleuronichthys ritteri</i>	10	47	56	74	88	81	24	18	66
<i>Pleuronichthys verticalis</i>	1	1	5	12	9	10	-	4	14
<i>Psettichthys melanostictus</i>	18	41	73	48	75	138	10	-	71
<i>Symphurus</i> spp.	-	-	-	-	1	-	-	-	-
Soleidae	-	-	-	-	3	-	-	-	-
Tetraodontidae	-	-	-	-	-	-	-	-	-
Disintegrated fish larva	184	223	274	311	319	542	84	74	458
Unidentified fish larva	147	147	256	217	263	485	60	72	422

TABLE 6. List of stations which were occupied twice in one month during 1961.

Station		Month
120.0	40.0	5
120.0	40.0	7

# INDEX

This index lists taxa included in Table 4 with their page numbers.

	Page
Anguilliformes .....	53
Clupeiformes	
Clupeidae	
<i>Etrumeus acuminatus</i> .....	53
<i>Sardinops sagax</i> .....	53
Engraulidae	
<i>Engraulis mordax</i> .....	54
Salmoniformes	
Argentinidae	
<i>Argentina sialis</i> .....	58
<i>Microstoma microstoma</i> .....	59
<i>Nansenia candida</i> .....	59
<i>Nansenia crassa</i> .....	60
Bathylagidae	
<i>Bathylagus</i> spp. ....	60
<i>Bathylagus ochotensis</i> .....	61
<i>Bathylagus pacificus</i> .....	62
<i>Bathylagus wesethi</i> .....	62
<i>Leuroglossus stilbius</i> .....	64
Opisthoproctidae	
<i>Macropinna microstoma</i> .....	67
Stomiiformes .....	67
Gonostomatidae .....	68
<i>Cyclothone</i> spp. ....	68
<i>Diplophos taenia</i> .....	70
<i>Ichthyococcus</i> spp. ....	70
<i>Vinciguerria lucetia</i> .....	71
<i>Vinciguerria poweriae</i> .....	74
Sternoptychidae .....	74
Stomiatoidea	
Chauliodontidae	
<i>Chauliodus macouni</i> .....	75
Idiacanthidae	
<i>Idiacanthus antrostomus</i> .....	76
Malacosteidae	
<i>Aristostomias scintillans</i> .....	77
Melanostomiidae	
<i>Bathophilus</i> spp. ....	77
<i>Eustomias</i> spp. ....	77
<i>Photonectes</i> spp. ....	77
<i>Tactostoma macropus</i> .....	78
Stomiidae	
<i>Stomias atriventer</i> .....	78
Myctophiformes	
Alepisauroidi	
Evermannellidae .....	79
Paralepididae	

	Page
<i>Lestidiops ringens</i> .....	79
<i>Notolepis risso</i> .....	80
<i>Stemonosudis macrura</i> .....	80
<i>Sudis atrox</i> .....	81
Chlorophthalmoidei	
Notosudidae	
<i>Scopelosaurus</i> spp. ....	81
Scopelarchidae .....	81
Myctophoidei	
Myctophidae .....	82
Lampanyctinae	
<i>Ceratoscopelus townsendi</i> .....	85
<i>Diaphus</i> spp. ....	87
<i>Lampadena urophaos</i> .....	88
<i>Lampanyctus</i> spp. ....	89
<i>Lampanyctus regalis</i> .....	92
<i>Lampanyctus ritteri</i> .....	92
<i>Notolychnus valdiviae</i> .....	94
<i>Notoscopelus resplendens</i> .....	95
<i>Stenobranchius leucopsarus</i> .....	96
<i>Triphoturus mexicanus</i> .....	98
<i>Triphoturus nigrescens</i> .....	102
Myctophinae	
<i>Centrobranchus</i> spp. ....	102
<i>Diogenichthys</i> spp. ....	103
<i>Diogenichthys atlanticus</i> .....	104
<i>Diogenichthys laternatus</i> .....	105
<i>Electrona rissoi</i> .....	107
<i>Gonichthys tenuiculus</i> .....	107
<i>Hygophum</i> spp. ....	107
<i>Hygophum atratum</i> .....	107
<i>Hygophum reinhardtii</i> .....	108
<i>Loweina rara</i> .....	109
<i>Myctophum nitidulum</i> .....	109
<i>Protomyctophum crockeri</i> .....	110
<i>Symbolophorus californiensis</i> .....	113
<i>Tarletonbeania crenularis</i> .....	115
Synodontoidi	
Synodontidae	
<i>Synodus</i> spp. ....	117
Gadiformes	
Merlucciidae	
<i>Merluccius productus</i> .....	117
Macrouridae .....	120
Ophidiiformes .....	120
Ophidiidae	
<i>Chilara taylori</i> .....	121
<i>Ophidion scrippsae</i> .....	121
Batracoidiformes	
Batracoididae	
<i>Porichthys</i> spp. ....	121

	Page
Lophiiformes	
Ceratioidei .....	121
Gobiesociformes	
Gobiesocidae .....	122
Beloniformes	
Exocoetidae .....	122
Scomberesocidae	
<i>Cololabis saira</i> .....	122
Lampriformes	
Trachipteridae .....	122
Beryciformes	
Melamphaidae	
<i>Melamphaes</i> spp. ....	123
<i>Poromitra</i> spp. ....	125
<i>Scopeloberyx robustus</i> .....	125
<i>Scopelogadus bispinosus</i> .....	125
Syngnathiformes	
Macroramphosidae	
<i>Macroramphosus gracilis</i> .....	126
Syngnathidae	
<i>Syngnathus</i> spp. ....	126
Scorpaeniformes	
Cottoidei	
Agonidae .....	126
Cottidae .....	126
<i>Scorpaenichthys marmoratus</i> .....	127
Cyclopteridae .....	127
Hexagrammidae	
<i>Oxylebius pictus</i> .....	127
<i>Zaniolepis</i> spp. ....	127
Scorpaenoidei	
Scorpaenidae	
<i>Scorpaena</i> spp. ....	128
<i>Sebastes</i> spp. ....	128
<i>Sebastolobus</i> spp. ....	131
Triglidae	
<i>Prionotus</i> spp. ....	131
Perciformes	
Blennioidei .....	132
Blenniidae	
<i>Hypsoblennius</i> spp. ....	132
Clinidae .....	132
Gobioidei	
Gobiidae .....	133
Icosteoidi	
Icosteidae	
<i>Icosteus aenigmaticus</i> .....	133
Labroidei	
Labridae	
<i>Halichoeres</i> spp. ....	133
<i>Oxyjulis californica</i> .....	134
<i>Semicossyphus pulcher</i> .....	134

	Page
Pomacentridae	
<i>Chromis punctipinnis</i> .....	134
Percoidei	
Apogonidae	
<i>Howella brodiei</i> .....	135
Bramidae	
<i>Brama</i> spp. ....	135
Carangidae	
<i>Seriola lalandi</i> .....	136
<i>Trachurus symmetricus</i> .....	136
Kyphosidae	
<i>Girella nigricans</i> .....	138
<i>Medialuna californiensis</i> .....	139
Malacanthidae	
<i>Caulolatilus princeps</i> .....	139
Sciaenidae .....	139
Serranidae .....	139
Scombroidei	
Gempylidae .....	140
Scombridae .....	140
<i>Sarda chiliensis</i> .....	140
<i>Scomber japonicus</i> .....	140
<i>Scomberomorus</i> spp. ....	141
Trichiuridae .....	141
Sphyraenoidei	
Sphyraenidae	
<i>Sphyraena argentea</i> .....	142
Stromateoidei	
Centrolophidae	
<i>Icichthys lockingtoni</i> .....	142
Stromateidae	
<i>Peprilus simillimus</i> .....	143
Tetragonuridae	
<i>Tetragonurus cuvieri</i> .....	143
Trachinoidei	
Chiasmodontidae .....	144
Pleuronectiformes .....	144
Pleuronectoidei	
Paralichthyidae	
<i>Citharichthys</i> spp. ....	144
<i>Citharichthys stigmaeus</i> .....	147
<i>Hippoglossina stomata</i> .....	148
<i>Paralichthys californicus</i> .....	148
<i>Xystreurus liolepis</i> .....	149
Pleuronectidae	
<i>Glyptocephalus zachirus</i> .....	149
<i>Hypsopsetta guttulata</i> .....	149
<i>Lepidopsetta bilineata</i> .....	149
<i>Lyopsetta exilis</i> .....	149
<i>Microstomus pacificus</i> .....	150
<i>Parophrys vetulus</i> .....	150
<i>Pleuronichthys</i> spp. ....	151

	Page
<i>Pleuronichthys coenosus</i> .....	151
<i>Pleuronichthys decurrens</i> .....	151
<i>Pleuronichthys ritteri</i> .....	151
<i>Pleuronichthys verticalis</i> .....	151
<i>Psettichthys melanostictus</i> .....	151
Soleoidei	
Cynoglossidae	
<i>Symphurus</i> spp. ....	152
Disintegrated fish larva .....	152
Unidentified fish larva .....	155





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